



Commonwealth of Learning

**Education development challenges and potential for flexible &
open learning in Tuvalu**

for

**Department of Education
Ministry of Education Youth & Sports**



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Abbreviations

ABS	Asian Broadcasting Satellite
AEfATP	Achieving Education for All - Tuvalu Programme
COL	Commonwealth of Learning
COMOSA	Commonwealth Open Schooling Association
CTC	Community Training Centre
ECCE	Early Childhood Care and Education
EdDep	Education Department
EFA	Education for All
EKT	Ekalesia Kelisiano Tuvalu (Tuvalu Congregational Christian Church)
ETSMP	Education and Training Sector Master Plan
ESMP	Education Sector Master Plan
GCCA:PSIS	Global Climate Change Alliance: Pacific Small Island States
ICT	Information and Communication Technologies
ITU	International Telecommunication Union
KBS	Kacific Broadcasting Satellite
MAF	Millennium Development Goal Acceleration Framework
MDG	Millennium Development Goals
MEYS	Ministry of Education Youth and Sports
NQF	National Qualifications Framework
NSSD	National Summit for Sustainable Development
NYEE	National Year Eight Examination
OPM	Office of the Prime Minister
EUCCCPiR	European Union Coping with Climate Change in the Pacific Island Region
EU PacTVET	European Union Pacific Technical and Vocational Education and Training
PEDF	Pacific Education Development Framework
PIC	Pacific Island Country
PIFS	Pacific Islands Forum Secretariat
PQF	Pacific Qualifications Framework
SPC	Secretariat of Pacific Community
TeL	Technology-Enabled Learning
TEMIS	Tuvalu Education Management Information System
TESP	Tuvalu Education Strategic Plan
TJC	Tuvalu Junior Certificate
TK	Te Kakeega
ToSIP	Tokai School Improvement Program
TSSC	Tuvalu Senior Secondary Certificate
TTF	Tuvalu Trust Fund
TVET	Technical and Vocational Education and Training
TVSD	Technical and Vocational Skills Development
USP	University of the South Pacific

Glossary

Falekaupule: The traditional assembly in each island of Tuvalu, comprise of elders including the Island Chief and in accordance to the island culture.

Kaupule: The executive arm of the Falekaupule and shall in the Falekaupule area perform all the functions conferred on by the Falekaupule.

Te Kakeega II: Tuvalu Strategic Development Plan

Maps of Tuvalu

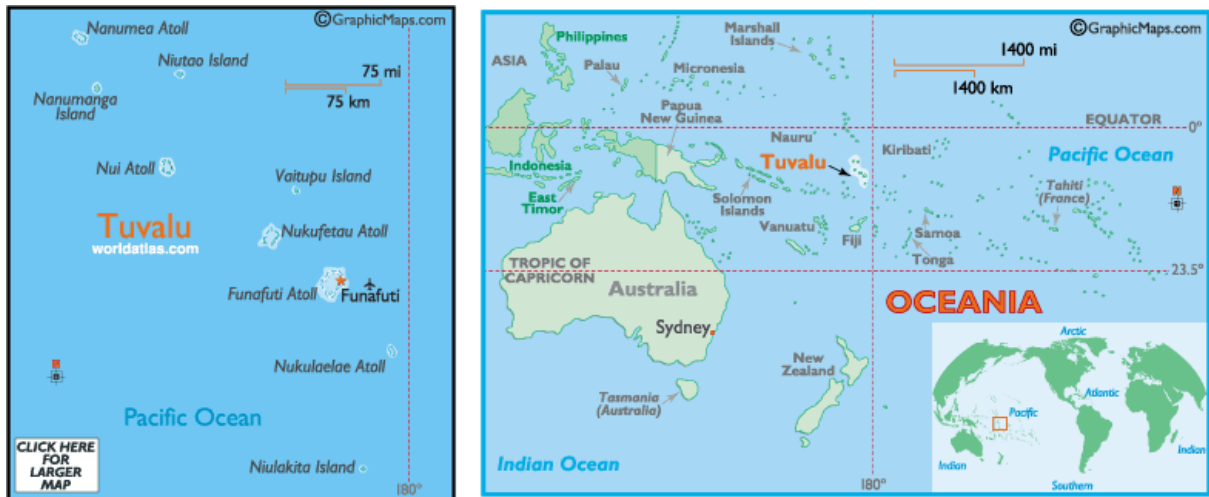
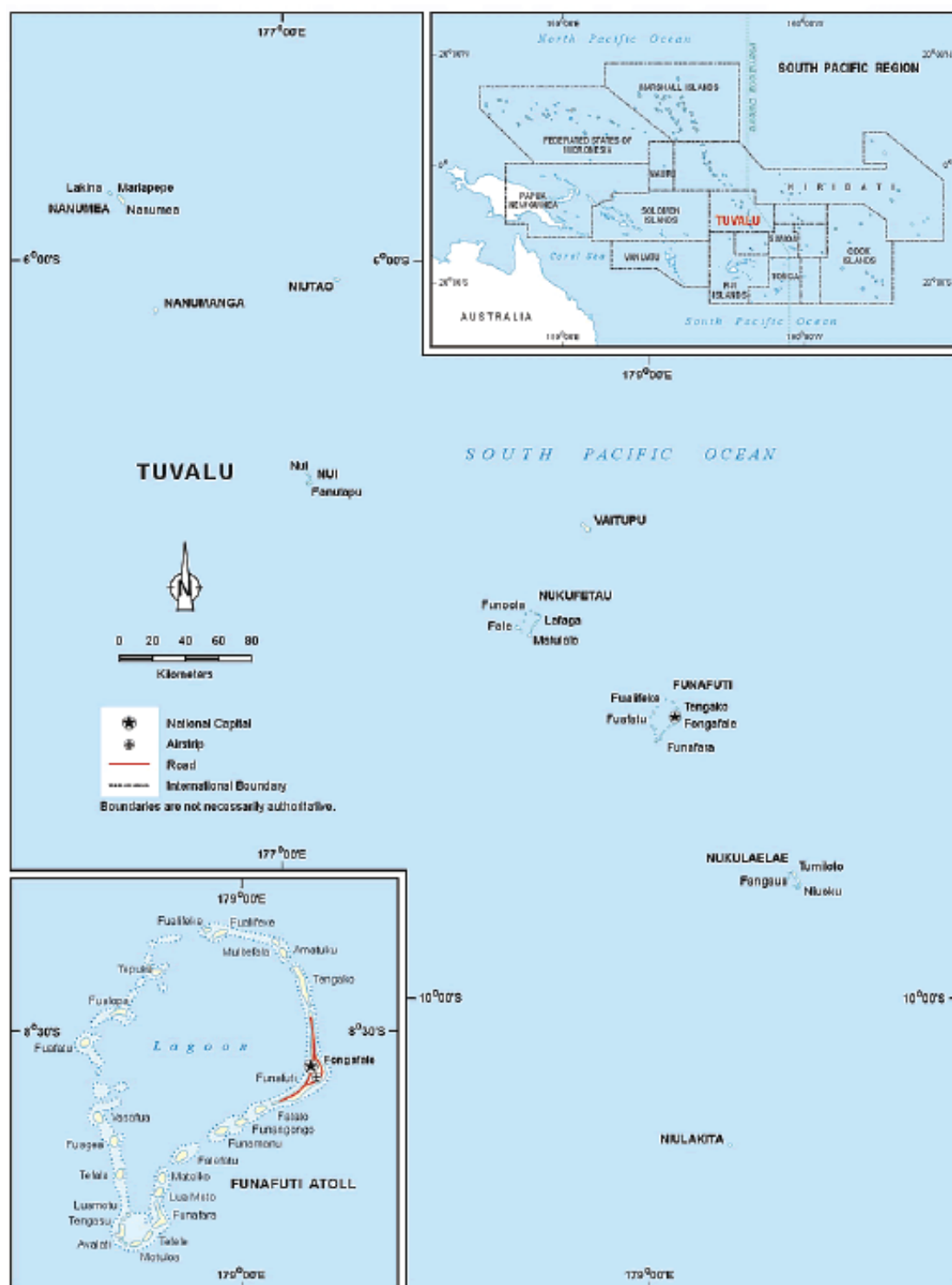


Figure 1a: (i) Map of Tuvalu; (ii) Map of Oceania. (Source: Commonwealth of Learning)



Executive Summary

Limited economy, tiny population and scattered geography pose a trilemma for Tuvalu. Te Kakeega II-Mid-Term Review (2011) together with Millennium Development Goals (MDGs) Acceleration Framework (2013) and Education For All (EFA) Review (2015) highlight many issues needing attention in order to fulfill Tuvalu's commitment to EFA, MDGs and their own strategic plan **Te Kakeega II National Strategy for Sustainable Development** (2005-2015). The summary provides FIVE key findings as a result of a country study and various consultations and modified focus group meetings.

The **quality of education** is discussed in light of high teacher-pupil ratio and student achievement. The issues of "drop-out" rates, "bullying issues", "unemployed youth", "poverty", and "general attitude" are becoming a nation-wide concern. Technical and Vocational Education Training (TVET) is being identified as an area which could help address some of these issues. The poor image of TVET, TVET skills training, TVET pathways for both formal and non-formal qualifications and its accreditation, use of Open and Flexible Learning (OFL) through appropriate technologies are considered as options that would help Tuvalu. Teacher training in the area of TVET, Open Educational Resources (OERs) and elearning is seen as a crucial factor to make "Education For Life" a sustainable proposition. The needs for a sound **infrastructure** cannot be emphasized enough. The **energy** supply for schools, **telecommunication** facilities and **buildings** must be addressed to meet the educational needs of the children of Tuvalu.

A number of national **policies** exist in the draft form such as Information Communication Technology (ICT) policy which indicates the importance of these documents placed by Tuvaluan. Similarly, a thorough consultation has been carried out for **National Strategy for Sustainable Development**. Thus, **Te Kakeega II** which was close to its life period (2005-2015) was being revised in October-November 2015. The emerging **Te Kakeega III** in initial draft form reaffirms the government's support towards sustainable development of Tuvalu. Technical assistance is once again required in the area of policy development owing to Tuvalu's limited human resources in the area of TVET, OER and elearning/ICT in education policy.

There is a trend of females outperforming males in the field of education and the female teachers are far more qualified than their male counterparts. While women are doing very well education, the very low pass rates for male students are a growing concern in Tuvalu. However, there are other areas where the presence of women is negligible as in representation in Kaupule. There are a number of Non Government Organisations (NGOs) both nationally and internationally that generate awareness on **gender mainstreaming** but Tuvalu has a long way to go.

Sustainable development for Tuvalu is an extremely challenging task and if that is not enough, Tuvalu faces the threat of climate change and rising sea levels. Tuvaluan social fabric is bonded with the strong ties from the culture and with the culture comes the support from the community. **Community support** is particularly visible in the case of primary schools and CTCs.

The study involved a documentary analysis followed by consultation with various individuals and departments as indicated in the annex 1. The study reports FIVE key findings :

- (i) Quality of Education,
- (ii) Policies,
- (iii) Gender mainstreaming,
- (iv) Sustainability issues
- (v) Community Support.

The **quality of education** needs to be improved for the sustainable development of Tuvalu. High teacher-pupil ratio and student achievement were perceived to be related and in turn responsible for behavioural and cognitive development of students. The issue of school drop-out rates coupled

with unemployed youth compels re-thinking education options provided to the children and youth of Tuvalu. The importance of TVET skills, awareness and a systematic pathway in TVET is deemed crucial by the individuals and departments consulted in this study. Teacher training is viewed as an essential strategy to tackle issues surrounding teachers' competencies. Infrastructure in terms of energy supply for schools and telecommunication facilities and school buildings require attention as it contributes towards the quality of education. A lack of **policies** and technical expertise in policy development in different areas of education is evident. Owing to Tuvalu's limited economy, tiny population geographically scattered on its nine islands, the **sustainability issues** are huge for Tuvaluans. Considering there are a number of educational resources developed under different regional projects, it would be useful to have some of these which are relevant for Tuvalu developed into OERs. **Gender mainstreaming** needs to be addressed in order to ensure there is equity for both genders. Considering the important role played by kaupule¹, **community support** in Tuvaluan society is crucial for the success of any activity, project or programme.

In light of the key findings and Tuvalu's **National Sustainable Development Framework (Te Kakeega II)**, COL could assist Tuvalu in the areas of TVET, teacher education and policy development. A **TVET based pilot project** in Tuvalu will help tackle unemployment and sustainable livelihoods. However, it would be extremely important to provide training and build capacity. The infrastructure is such that solutions will need to make use of appropriate technologies in the delivery of these trainings. The training materials will need to be contextualised to suit the Tuvaluan context. A Training Of Trainer (TOT) model for training will help Tuvalu multiply its capacity independently. There is a general acceptance for **Open and Flexible Learning**, however, for the sustainability and success of it, appropriate technology and training will be crucial. Teacher training in the area of TVET, **OERs** (including development of OERs) and **ICT in education/elearning** is highly recommended. Technical assistance in the area of ICT in Education/ elearning policy, OER and TVET **policy development** would be appropriate.



Figure 2: Land reclamation in process, Funafuti, Tuvalu –November, 2015 (Photo: Shikha Raturi)

¹ Kaupule is the executive arm of the Falekaupule and shall in the Falekaupule area perform all the functions conferred on by the Falekaupule. Falekaupule is the traditional assembly in each island of Tuvalu, comprise of elders including the Island Chief and in accordance to the island culture.

1.0 Introduction – Tuvalu Education Context

Tuvalu is the second smallest nation with the total land area of 26 square kilometres (10 square miles) and 10,782 people (2015 census) in the region of the South Pacific. This chapter will introduce Tuvalu's geography and development context with the aim to provide an understanding of its unique characteristics and identity. The current education system is discussed briefly to provide an overview of its reach and education development issues. Major policies and strategies assisting the education development in Tuvalu are reviewed next. The Commonwealth of Learning (COL) has committed its support to Tuvalu and has identified five priority areas. This chapter explores synergies that exist between COL's priority areas and Tuvalu's national policy goals and objectives and how the two can work in together to make a positive contribution towards Tuvalu's sustainable development.

1.1 Objective of the Study

The general objective of the study is to conduct a country study on the education development challenges and potential for flexible and open learning in Tuvalu. The report makes recommendations after a review of CoL's strategic plan with particular focus on four of its programme areas and situational analysis of Tuvalu's policy context and education challenges. The four programme areas in focus are Technical and Vocational Skills Development (TVSD), Open Schooling, Technology-Enabled Learning and Teacher Education. The Terms of Reference (ToR) for the study are given in Annex 6 of this report.

1.2 Geographical and Development Context

The Tuvalu archipelago (formerly known as the Ellice Islands in the Gilbert and Ellice Island Colony) comprises nine low lying coral atolls with a total land area of approximately 26 square kilometers dispersed over 1.3 million square kilometers of the Pacific Ocean. These atolls are stretched in a north-south direction over approximately 560 kilometers between latitudes 5 degrees and 11 degrees south and longitudes 176 degrees and 180 degrees east. Five of the islands (Nukufetau, Nanumea, Nui, Funafuti and Nukulaelae) are true coral atolls, with a reef platform surrounding a central lagoon. The other three islands (Nanumaga, Niutao and Niulakita) are single islets composed of sand and coral materials thrown up by wind and wave action. One island (Vaitupu) has the character of both an atoll and a reef island. The islands vary in size with Vaitupu as the largest island covering a land area of 4.9 square kilometers while Niulakita is the smallest island covering a land area of 0.4 square kilometers. Tuvalu itself is one of the small island nations amongst the Pacific Island Countries. Its nearest neighbours are Kiribati to the north-east, Samoa to the south-east, Fiji to the south, Vanuatu to the south-west, Solomon Islands to the west and Nauru to the north-west, of Tuvalu.

Tuvalu has a population of 10,782 (2015 census as per Internet World Statistics²) / 11,206 (2012 census as per SPC site³). This population is dispersed over nine atolls making economies of scale a challenge in the developmental context. Tuvaluans are ethnically Polynesian and bear close ties with Tokelauans and Samoans; the ties with Samoans are reflected in Tuvaluan language which is close to Samoan language. The connection with i-Kiribati settlement in 1900s is reflected in Nui islands where they speak i-Kiribati language. Both Tuvaluan and English are the official languages of Tuvalu and small islands use vernacular language. English remains the dominant language for the education system.

² <http://www.internetworldstats.com/stats6.htm#oceania>

³ <http://www.spc.int/prism/tuvalu/en/>

Tuvalu's social society fabric is woven around the chiefly social system. Falakapule, comprising the island chief and men over 50 years of age, forms the decision making body of each island community. They have a strong and peaceful traditional culture based on trust, cooperation, common welfare and social stability, with each family allocated a role in the community. The Tuvaluan society has the advantages of resilient culture, an egalitarian society and firm democratic principles. There is a 6 member team for the Kaupule which is the working arm for Falekaupule (Kaupule is the Governing body for Falekaupule). All matters are taken to Falekaupule for final approval during the monthly meeting. The government appoints the secretary for Kaupule, treasurer, planner and the community worker (responsible for women project).

The six member team of Kaupule is as follows with each one of them responsible for a department:

1. Pule Kaupule ('Pule' means 'Leader') Finance and Personnel
2. Tokolua Pule ('Tokolua Pule' means 'Deputy')
3. Member (Women and Youth)
4. Member (Workshop and Projects (developmental issues))
5. Member (Health and Environment)
6. Member (Fisheries)

Tuvalu's status is classified as a Least Developed Country based on its gross income per capita, human assets index and economic vulnerability. The Tuvalu Millenium Development Goals (MDG) progress report highlights that the Tuvalu's LDC status and smallness of the island signify major constraints and challenges in terms of social and human development. The report further suggests Te Kakeega II (TKII is the government policy, 2005-2015) encompasses strategies needed to tackle these constraints and challenges with overseas development aid. Te Kakeega II framed around MDGs promises Tuvaluans better employment, better health and education, improved basic infrastructure and social stability.

However, the creation of cash economies has been slow and the capacity of public services and health services has struggled to find a balance to meet the demands of changing lifestyles owing to urbanization. The impact of rapid urbanization is becoming visible on the social and physical fabric of the capital, Funafuti. Tuvalu continues to work on ways to tackle these demands. The country faces high vulnerability to external economic and environmental events. Tuvalu is one the few atoll countries which the face maximum brunt of climate change impacts. According to the EFA National Review report (2015), "Tuvalu is a signatory to Millennium Declaration and, while significant progress has been made towards the achievement of these goals, strategic interventions are required to fulfill the established targets." (p.23)

There has been little development in terms achieving MDG 1⁴ and the MAF report (2013) predicts it is unlikely to be achieved by 2015.

"The incidence of poverty has changed very little on Funafuti. On the outer islands, on the other hand, the data suggests that there has been a significant increase in the incidence of basic needs poverty of around five percentage points. The level of basic needs poverty incidence on the outer islands in 2010 is estimated to have risen to 24.8 percent (from 17.5 percent in 2004/05)". (Tuvalu Trust Fund Advisory Committee Annual Report for 2010 as cited in MAF Report, 2013, p. 20)

Tuvalu has few natural resources and thus the potential for economic development is limited. It is heavily dependent on international donors and development partners. Tuvalu Trust Fund (TTF) is a trust established by international donors in 1987. TTF aims at helping the country pool all its financial revenues. The income generating sources such as fishing licenses and the famous "business deal over its .tv domain" and other country taxes are part of Tuvalu financial revenue. The

⁴ MDG 1: Eradicate Extreme Poverty and Hunger

Agriculture and fishing sector providing a large subsistence co-exists with a newly developing cash economy largely dominated by government activities. One of the major sources of family income is remittances from seafarers working overseas. There is a small private sector for small skills and trade with a few NGOs providing employment.

Tuvalu experiences a trilemma with its limited economy, tiny population and geographically dispersed island nation. These in turn result in a shortage of skilled human resources and financial resources coupled with access to its nine scattered tiny atolls and coral islands which make the sustainable development of Tuvalu a difficult ask.

1.3 The Education System and its development

The education system in Tuvalu has made a tremendous contribution to help achieve MDG 2, however, according to various reports the quality of education still needs improvement (Annex 5). There are a total of 18 Early Childhood Care and Education (ECCE) schools, 10 primary schools and two secondary schools which serve nine islands and educate approx. 2500 students every year with the help of approx. 220 teachers. The thirty schools are located on the nine outer islands with little transportation and ICTs make the connection with the capital, Funafuti a bare minimum (Figure 3). The annual population growth rate⁵ is 0.2 for the year 2014 which has remained steady since 2008 (SPC: Statistics and Demography Programme on World Bank Site⁶). The problem of youth employment is steadily growing, with the 2002 census indicating 10% of available youth is unemployed (MAF, 2013). In 2013, the number of male children out of primary school was 110 whereas the number of female children not attending school was 85 (World Bank Data site⁷).

⁵ Annual population growth rate for year t is the exponential rate of growth of midyear population from year t-1 to t, expressed as a percentage (as per World Bank)

⁶ <http://data.worldbank.org/indicator/SP.POP.GROW/countries/1W-TV?display=graph>

⁷ <http://data.worldbank.org/indicator/SE.PRM.UNER.FE/countries/TV?display=graph>
<http://data.worldbank.org/indicator/SE.PRM.UNER.MA/countries/1W-TV?display=graph>

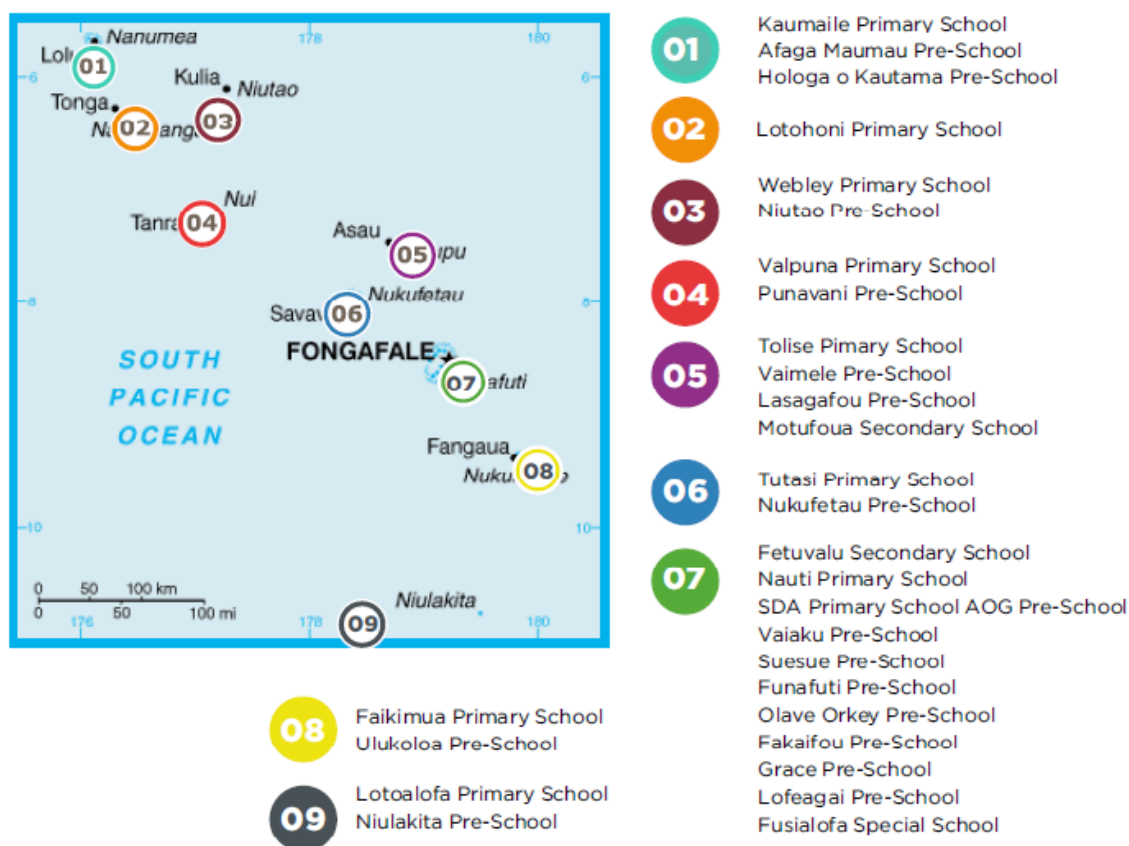


Figure 3: Geographical location of schools across Tuvalu (Source: Department of Education, MEYS, Tuvalu)

1.3.1 Primary Education

The government provides free education for all primary children and supports the school infrastructure, human resources (teachers, administrative and support staff), educational resources and tuition fees with the development partners' support. The Education Department (EdDep) is directly responsible for education of children and training of teachers' right from pre-primary/ECCE (kindergarten) to year 13. It is compulsory for all children ages 6-15 to attend school. 9 out of 10 primary schools are run by the government and there is a private Seventh Day Adventist primary school situated in Funafuti. EdDep supports SDA School by providing a small subsidy towards its operational cost and in-kind support in the form of teachers' professional development activities and materials.

Primary education comprises eight years of schooling (Classes 1-6 and then Forms 1-2). According to Tuvalu Education Management Information System (TEMIS) database, there are a total of 1753 students and 109 teachers for the year 2015. Approximately, 20% of teachers have a bachelor's degree and 2% have a master's degree. The teacher pupil ratio is 1:16 except for Nauti Primary school where the teacher ratio hovers around 1:25 for the year 2015 (TEMIS); Nauti is the largest primary school in Tuvalu (Figure 4). The Kaupule also support Primary schools and this is generally in-kind (such as land for school, accommodation for teachers) and occasionally assists with minor repair works. The parents contribute towards their children's uniform and pay a small amount between AUD 2 and AUD 5 per term. The students in primary school seem to have universal access to education with the support from home, school, community and the government plus the international development partners in certain cases.



Figure 4: Nauti Primary School, Funafuti, Tuvalu (Photo: Shikha Raturi)

1.3.2 Secondary Education

The students in Class 8 (Form 2) sit for National Year Eight Examination (NYEE) to enter the secondary schooling system (Year 9/Form 3), however, the pass rate is of concern especially the male students' pass-rate (Figure 5). The female students have consistently been doing better over the last ten years as indicated by their higher pass rates. The students sit for exams only in English, Mathematics, Basic Science and Social Science but they also learn Business Studies, Art & Craft, Physical Education, Writing and Printing.

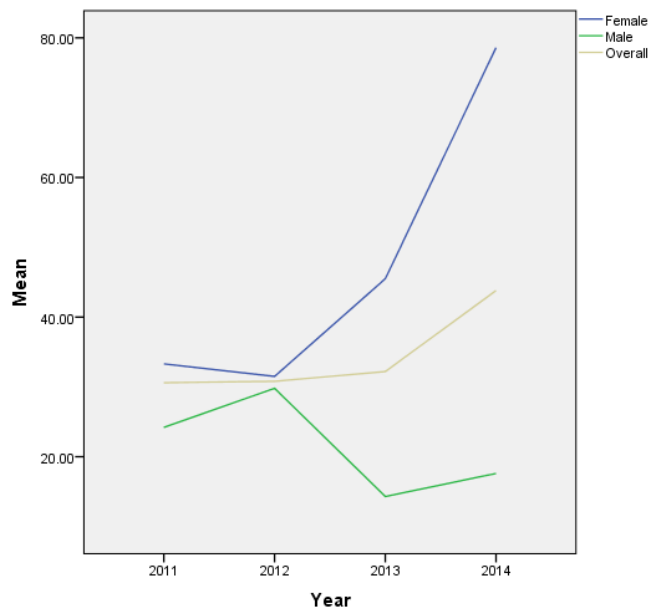


Figure 5: Pass rates for male students, female students and Overall students pass-rate in NYEE

Secondary education is available to the children purely on the basis of achievement in the NYEE. The ones who pass NYEE proceed to Year 9/Form 3 to begin their secondary schooling. The subjects covered are English, Mathematics, Biology, Chemistry, Physics, Agriculture Science, Geography, History, Accounting, Economics, Computer Science, Home Economics, Design Technology, Woodwork and Commercial Studies. The students are tested and screened through an examination process again at Year 10/Form 4 (Tuvalu Junior Certificate Examination (TJCE)) and at Year 12/Form 6 (Tuvalu Senior Secondary school Certificate (TSSC)).

The pattern of high pass rates for female students remains consistent for TJSC (Figure 6) as well as for TSSC examination. The data for TSSC pass rates could be obtained only for 2 years from TEMIS,

however, the results indicate high pass rate again for female students. The low performance of male students in both these exams are conducted through two secondary schools: 1. the government run Motofua Secondary School (MSS) situated in Vaitupu and 2 faith based private school called Fetuvalu Secondary School (FSS) based in Funafuti. FSS runs on government grant though it is private and offers an alternative programme and examination. FSS is run and operated by Ekalesia Kelisiano Tuvalu (EKT), the Congregational Church of Tuvalu. Poor students are given an opportunity to study by granting a waiver of their tuition fees and sometimes parents have an option to take a loan such as one offered by the affluent Kaupule in Niutao.

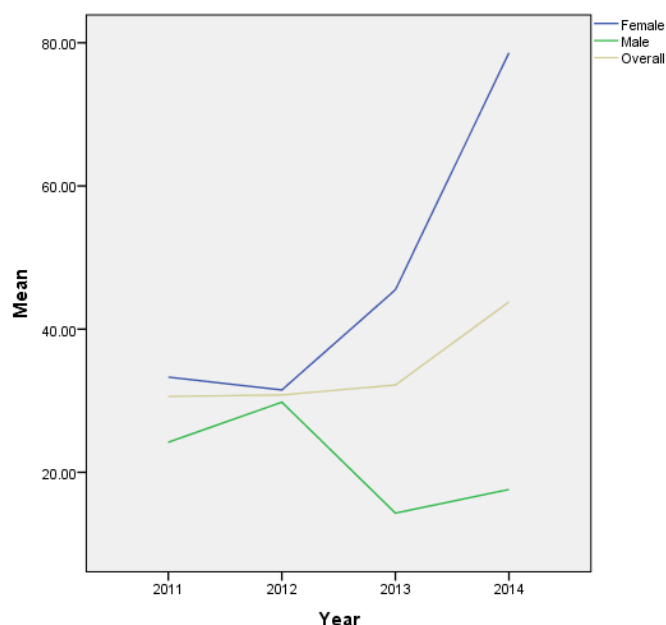


Figure 6: Pass rates for male students, female students and overall students pass-rate in TJCE

1.3.3 High School and Tertiary Education

The successful students from Form 6/Year 12 proceed to Form 7/Year 13 at University of the South Pacific (USP) Extension Campus or the government school (MSS). Form 7 is a pre-tertiary qualification. The successful students from Form 7 go to USP or overseas university to then complete their tertiary qualifications. The University of the South Pacific was established in 1968 and is one of only two regional universities in the world.

“The University of the South Pacific is the premier institution of higher learning for the Pacific region, uniquely placed in a region of extraordinary physical, social and economic diversity... It is jointly owned by the governments of 12 member countries: Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Samoa. The University has campuses in all member countries. The main campus, Laucala, is in Fiji. The Alafua Campus in Samoa is where the School of Agriculture and Food Technology is situated, and the Emalus Campus in Vanuatu is the location for the School of Law.” (USP Website)

The USP-Tuvalu campus has the capacity to hold satellite tutorials for the Tuvaluan students who are able to study some of the courses via the distance learning mode from Tuvalu (Figure 7).

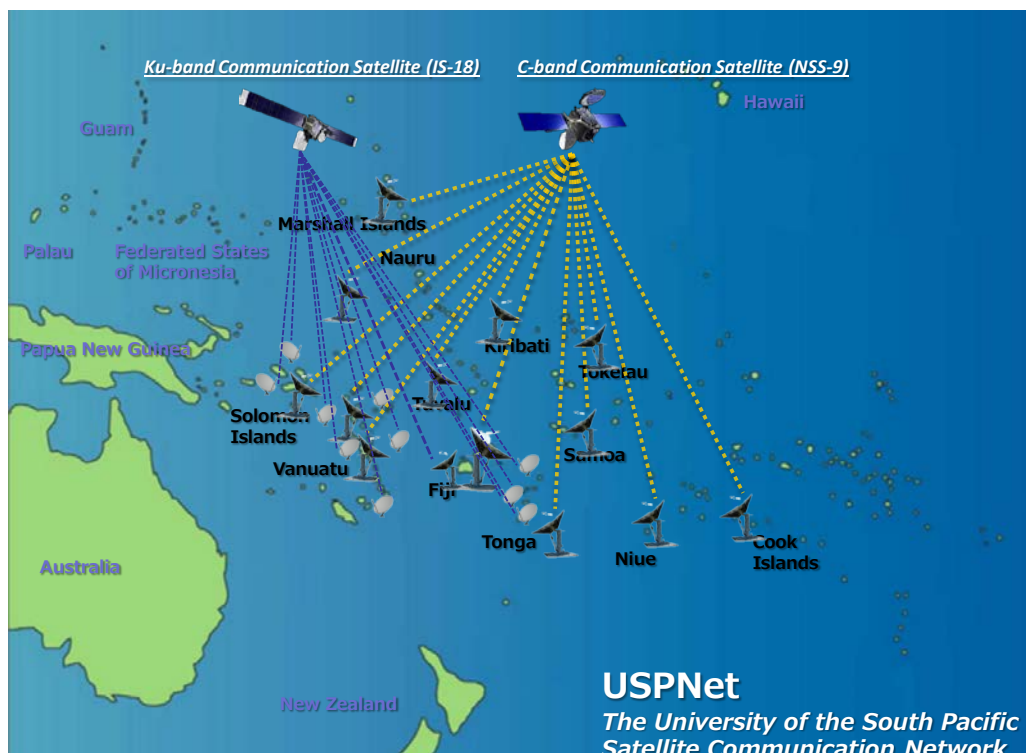


Figure 7: USPNet coverage for its 12-member countries (Photo Courtesy: Shinya Murakami, JICA)

Distance learning mode provides an opportunity to the students to stay closer to their home as they learn to adjust to a university lifestyle. The USP Tuvalu campus offers a combination of academic courses run through different faculties in USP, foundation courses through School of Foundation and also the TVET courses through the Pacific TAFE.

1.3.4 Technical and vocational education and training

Tuvaluan society has a unique culture whereby it both supports and contradicts human rights global instruments. On one hand, the culture binds the families to cooperate and collaborate for the benefit of everyone in Tuvalu. On the other hand, the apex of the social hierarchy is reserved for males and there is a clear division of power and labour by gender. There is an absence of women in the Kaupule (traditional/local assembly) as well as the government whereas the men dominate both the sectors. Girls are generally taught domestic science and home economics while the boys, as early as in their teens are taught “men’s tasks” such as carpentry, fishing, toddy making/cutting and taro cultivation. However, it is through education that women are well placed in education professions as they tend to achieve higher qualifications than men enabling Tuvalu to achieve well in MDG 3. There is a clear need for technical and vocational skills for both men and women and boys and girls equally.

Technical Vocational Education and Training (TVET) is seen as an alternative to the academic programme. This is evident by the fact that since 2010/11, a TVET stream has been re-introduced in senior primary and secondary school system to cater for students who do not excel academically. The Community Training Centre was established in 1982 and it served from 1982 to 1988. It ceased operation owing to a number of reasons discussed in the next chapter. Realizing the need for skills training as a second option, the CTC was revitalised during 2008-2010 with the help of EdDep and local communities. Students who did not qualify NYEE in senior primary and TJCE and TSSC in secondary were re-routed to learn TVET courses at the CTCs in primary and secondary respectively. These kind of formal settings are dependent largely on community support at primary level, and

therefore, its success is largely dependent on community support. The secondary level TVET courses which are dependent on government support seem to be doing slightly better as the government support is usually consistent with its aim to meet the needs.

On the other hand, TVET is offered in one well established formal institution and students are awarded a certificate after the successful completion of the course too. The Tuvalu Maritime Training Institution (TMTI) originally used to offer vocational training programme for male students however, it recently opened its door for 5 female students per intake. Moreover, USP Tuvalu Campus (originally started as an extension centre of USP in 1988) also offers TVET courses together with its basic foundation studies and preliminary courses together and degree programmes. Lingam, Raturi and Finau (2015) highlight:

“USP is credited in the region for pioneering the use of satellite technology for student support, especially for Distance Education (DE) as well as for all other communication and the information transfer through USPNet and has made continuous effort since. USPNet, the telecommunication umbrella of the university, has helped bridge the digital divide in the region” (p.345).

USP Tuvalu Campus has experienced the incremental progress made by USP in acquiring its state-of-the-art facilities in the Information Communication and Technologies (ICTs). As a result the DE has moved from print mode to blended and online learning modes. Since 2007, USP employed Moodle as its Learning Management System making the delivery of its entire programme offering flexible especially for its distance learners such as the ones in Tuvalu. Thus, students from MSS and FSS can join USP after successfully completing Year 12. Tuvalu government’s depends on international donors for TVET delivery. AusAID pledged \$2.265 million to support TVET delivery by Australian trainers to teach courses such as motor vehicle maintenance, industrial electronics, and joinery, plumbing and electrical generator maintenance via the CTCs and MSS and FSS during the period 2009-2013.

(http://www.icde.org/projects/regulatory_frameworks_for_distance_education/country_profiles/tuvalu/education_system/)

TEMIS

In addition to all of these developments, the government with the help of DFAT (previously AusAID) established the Education Information Management System (EMIS) enabling EdDep to manage its records and data online. This has proven to be a very useful initiative as MEYS is able to monitor various aspects of data pertaining to school education. As the Director EdD remarked, “TEMIS helped us analyse and compile this report, and we have also used baseline data from the system to plan our interventions so we can meet Tuvalu’s education policy goals.” (Education Department, 2014). The tables provided in Annex 4 are furnished by TEMIS.

There has been tremendous support from the Tuvalu government and international donors and development partners in moving Tuvalu’s education system where it is today.

1.4 Major Education Policies and Strategies

Tuvalu has given highest priority to human resource development since early 1990s whereby “Education For Life” (EFL) appeared as one of the five priority areas in the Kakeega o Tuvalu (National Development Strategy 1995-1998). The EFL plan targeted quality education at all levels and emphasized the quality of education as key to social and economic development. This resulted in an increased budgetary allocation for education (between 20-25% of annual budget per year); however, only 6% of this budget is allocated for TVET. Tuvaluan government has been pro-active in ensuring EFAs and MDGs are achieved with the support from the development partners.

The majority of policies in Tuvalu exist in the draft form (MAF, p. 43). There are 4 key documents guiding Tuvalu towards Education for sustainable development. **The Malefatuga Declaration** (Annex 5) was written as a consequence of a National Summit for Sustainable Development (NSSD) held at the Tausoalima Falekapule from June 28th to July 9th, 2004, in Funafuti. The Malefatuga Declaration gave rise to **Te Kakeega II National Strategy for Sustainable Development (TKII NSSD)** 2005-2015. TKII NSSD proposed a strategic framework with eight priority areas and expected results. Eight strategic areas underpinned in the Te Kakeega II are:

1. Good Governance
2. The Economic: Growth and Stability
3. Social Development: Health, Welfare, Youth, Gender, Housing and Poverty Alleviation
4. Outer Islands and Falekaupule Development
5. Employment and Private Sector Development
6. Human Resource Development
7. Natural Resources: Agriculture, Fisheries, Tourism, and Environmental Management
8. Infrastructure and Support Services

And the expected results are:

- More employment opportunities
- Higher economic growth
- Better health care
- Better education
- Better basic infrastructure
- Continued social stability

The EFA goals are linked to the National Priorities of Tuvalu as given in Te Kakeega II. According to the MDGs status document (Annex 5), while Tuvalu has made remarkable progress in MDG 2 Target 3 as compared to its regional counterparts; 95% of its population is literate with equality achieved at all levels with both genders. However, Tuvalu needs to educate and train its people in the area of technical and vocational skills. Similarly, gender equality has improved, more improvement is desirable. Most importantly global partnership remains an unfinished business (Target 16⁸) and target 16 needs to be improved further; an area development partners such as COL should focus when it decides to assist in the area of TVSD. One of the key MDG issue highlighted by this report is Tuvalu's status as an LDC and SIDS, and the need for overseas development assistance if Tuvalu is to achieve MDGs (and now Sustainable Development Goals (SDGs)). Tuvalu remains vulnerable in capacity building, infrastructure development and lack of financial resources.

Te Kakeega II claims structural weaknesses in the Tuvalu economy and suggests that these weaknesses can be improved through policies and donor support in the right direction. The NSSD highlights *"education and training will target the skills and manpower demands in the different sectors of economy"* (p.13). The stakeholders' consultation findings in the next two chapters will identify how far they think they have gone with education and training and the current status of technical and vocational skills.

There is a need for increased training and job opportunities in Falekaupule and outer islands alike for both genders; however an emphasis is made to ensure small business and entrepreneurial training for women in particular in this document (TKII). Guidelines were provided for the relevant policies to ensure youth and women development took place. The lack of employment and income generation opportunities are listed as some of the reasons for hardship and poverty.

⁸ Target 16: In co-operation with developing countries, develop and implement strategies for decent and productive work for youth

The key policy objective on education and human resources calls for expansion and improvement in technical and vocational training and its mainstreaming in schools, increase in educational resources and other facilities in the institutions. The **Education and Training Sector Master Plan (ETSMP)**, in its draft form focuses on various aspects of education and provides a list of activities to improve education instruction and training with TVSD being one of them. Followed by ETSMP, it seems there was an **Education Sector Master Plan (ESMP, 2006-2010)** produced and a mention of this has been made in several reports but a copy of ESMP could not be obtained. Fisheries and agriculture emerge as two areas where skills and training can be provided for sustainable development of Tuvalu in this document.

The costs of infrastructure and support services are high owing to smallness and low numbers of inhabitants on these outer islands; economies of scale are a real issue. The implementation and monitoring section in this document highlights the use of sector master plans and departmental corporate plans and public sector investment programme to achieve the targets. The stakeholders' consultation should be useful in this area too.

The National Task Force is responsible for overall monitoring of national strategies including the island Pule Denua and Ulu aliki while the Development Coordinating Committee responsible for the interim monitoring is tasked to prepare annual progress reports to body according to Te Kakeega II, NSSD 2005-2015.

The Te-Kakeega II Mid-Term Review report (TKII MTR) was written in 2011 with the aim to monitor the progress of TKII and inform problems and challenges faced in the implementation of TKII during its first five years as well as advise new strategies to ensure TKII is successfully implemented by 2015. In his foreword, the Minister of Finance and Economic Development writes that the document also *"guides the government policies as well as Tuvalu's development partners' assistance to Tuvalu for the remaining life of the TKII"*.

The report provides this guidance in the form of short-term, medium-term and long-term milestones to be achieved by 2013, 2015 and 2025 respectively (annex 5). The goal of Strategic Area 3 focusing on "Social Development" is:

Provide Tuvaluans with the highest attainable standard of health, adequate accommodation and an active life free from hardships and gender discrimination.

Strategic Area 3 emphasised the strategies (Annex 5) for youth development to *"Improve the welfare and opportunities available to youth"* and *"Promote gender equity and expand role of women in development"*. Short-term milestone on training for youth in the area of healthy lifestyles, microfinance and TVET and a long-term milestone emphasising on availability of opportunities for youth are proposed. The issue of gender equity still persists which is evident in its short-term milestone to ensure Gender mainstreaming into all sector in TKII, custodial right to women for land and continuation for entrepreneurial training.

Strategic Area 5 focuses on **"Private Sector and Employment"** and the goal is:

To be the engine of growth and development providing employment and commercially sustainable service.

The strategy "Improve enabling environment for private sector development" suggests provision of training in different areas of business skills.

The Strategic Area 6 if handled carefully and executed precisely should enable other strategic areas too. The goal focusing on **"Education and Human Resources"** says:

Provide quality education that equips people with the knowledge, skills and attributes to achieve a higher degree of self-reliance in a changing world that is consistent with Tuvalu's spiritual values.

There are synergies in the recommended milestone through various strategies with COL's top priorities for Tuvalu. The strategies include "Improve teaching and learning", "Provide equal education opportunities for all", "Improve management of the education system" and "Improve Outer Islands (OI) development".

Strategic Areas 7 and 8 also emphasise the need for TVET skills in various fields and therefore the importance of strategic area 6 becomes the lifeline for the sustainable development of Tuvalu. The goal for 7 focusing on "**Natural Resource**" calls for:

Improve the management and use of natural resources for the sustainable development of Tuvalu.

Strategic Area 8 focuses on "**Infrastructure and Support Services**" and the goal is:

Provide efficient quality infrastructure and support services that are competitively priced and sustainable.

Training in the sector of Agriculture, Fisheries and Environment under Priority 7 and all aspects of renewable energy under Strategic Area 8 is highlighted in this report indicating a clear need for TVET skills. The commitment of the Tuvaluan government is evident in The Way Forward 2015 in TKII-MTR (Annex 5).

The Tuvaluan government's actions further speak for itself such as support for the plans in the area of education for sustainable development. The NSSD recognised "education and human resources" as the backbone for the sustainable development and this paved way for 5-years strategic plans; **Tuvalu Education Sector Plan I and II (TESP I and TESP II)** for the periods 2006-2010 and 2011-2015 respectively. TESP I concentrated on quality and relevance of Tuvaluan education and its accessibility. TESP I provided a list of activities with the aim to enhance education management and instructional practices. TESP II addresses key policy objectives in NSSD and uses an 'issue-based' approach rather than a 'sub-sectoral' format. It is designed as a logframe and categorised into Outcome, Outputs, Sub-Outputs and Strategies (TESP II, p.3). The Outcomes and Outputs align closely with milestones in MTR-TKII. An excerpt from TESP II is given in annex 5.

According to the MDG Acceleration Framework Report (MAF, 2013), there have been improvements in the area of providing universal access to primary education (MDG 2) but the quality of education still deserves attention to further improve it. On the other hand, Tuvalu has made significant progress in MDG 3 the promotion of gender equality and empowerment of women with women taking a lead in academic fields and obtaining high qualification (ibid). There are now increased opportunities to encourage women's participation in politics and Falekaupule (ibid) The MAF (2013) has identified 35 key solutions to achieve MDGs by 2015 (Annex 5)

1.4.1 EFA Review 2015

The key themes which emerged from the priorities as identified in the EFA Assessment (2000) were the need for teacher training for all aspects of education, the need for more teachers, the need for vocational and life skills education strategies and opportunities, and the need for more resources including buildings and basic learning aids (EFA 2000 Assessment as cited in EFA 2015 National Review Report)

The EFA review carried out in 2015 suggests that Tuvalu has made significant progress towards achieving all the SIX EFA goals. The fact that 60% adults complete secondary education despite high rates in ECE and primary education, need for open schooling and training opportunities in technical and vocational skills becomes imperative. This report states:

“A large population is engaged in subsistence agriculture and fishing with the formal cash economy dominated by government activity and there is a small private sector. The small economy and population combined with widely scattered small islands has led to a severe shortage of work skills, a lack of financial resources and problems with access to the outer islands. Particular challenges are faced with the developing infrastructure, small numbers of professional staff and lengthy and intermittent travel times to the islands which make it difficult to ensure the effective delivery of health care, education and services for the vulnerable” (p. 9)

The need for work skills training is quite clear in this report and efforts need to be made for Tuvalu’s sustainable development especially amidst climate change threat and its small size. A strong relationship between the government, the Kaupule and the community has been highlighted as an important feature for Tuvalu’s success in quality education.

The National Review of EFA 2015 reports, Tuvalu has made *“an excellent effort and progress towards the achievements of the EFA Goals, despite the limited national capacity”* (pg 49). The emphasis is made on the achievement of *“Universal Primary Education and improving quality education (to some extent)”* (p. 46).

EFA Goal I is reported to have made significant progress in the area of ECCE owing to the guidance from NSSD (in particular TESP I and II) except for some quality issues such as infrastructure and lack of implementation of ECCE policy. Tuvalu has enforced free and compulsory education beyond primary (to year 10) in its effort to provide Primary Education to all its children. There has been some improvement in the area of teacher training and professional development as well as Pupil-Teacher Ratio (PTR) too. The quality of learning and teaching and the learning environments still needs to be investigated to assess the quality of primary education before Tuvalu can confidently claim achievement of EFA Goal 2.

EFA Goals 3 and 4 are considered successful in light of Tuvalu’s high very high literacy rates amongst youth 15 years and over (approx. 99%). However, there are concerns over the high failure rates in NYEE, PSSC and TSSC. The failure at NYEE level impacts entry to secondary education while failure at PSSC and TSSC impacts entry to tertiary education. To make situation more complex, the report (EFA 2015 National Review report Tuvalu) asserts that little is known about availability of education and training beyond schooling for both genders. This implies that the future of school “drop-outs” in Tuvalu is uncertain and there seems to be a lack of clear guideline/policy in this regard.

EFA 2015 National Review reports that Tuvalu has scored well in EFA Goal 5 indicating none or little gender disparity in access to education at all levels. The women outnumber men in academic qualification and therefore are well placed in the area of education. The Gender parity Indices⁹ (GPI). The GPI data for Gross Enrolment Ratio (GER) and Net Enrolment Rate (NER) give a mixed result over the last ten years but the overall current picture is in favour of women. *“The division of gender roles in employment and education reflects the distinct gender division in society and culture”* (p. 32). This is demonstrated by the gender preferences towards vocational and training skills. Men are seen to lean towards learning vocations such as carpentry and joinery and fabrication and welding while women tend to opt for sewing and gardening. However, gender discrimination has been addressed

⁹ a GPI value between 0 and 1 indicates disparity in favour of male whereas a value greater than 1 favours women

by revising the admission criteria at Tuvalu Training and Maritime Institute (TMTI). Since 2013, TMTI has started accepting a total of 5 female students per intake as opposed to its previous regulation of only male students to attend their formal vocational program. The revised admission regulation is not the best as it still discriminates and not provides equal opportunity on the basis of merit but limits it to 5.

Tuvalu is consistently working towards EFA Goal 6 which targets improving all aspects of quality education ensuring excellence in the area of literacy, numeracy and life skills for all.

Tuvalu's efforts to become a healthy, educated, peaceful and prosperous nation can only be achieved with a combination of support for capacity building and infrastructure for sustainable development by development partners and donor agencies, and development and implementation of relevant policies.

The report has made six recommendation in the area of (a) ECCE, (b) UPE, (c) Literacy and Life Skills, (d) Alternative for school "drop-outs", (e) Further improvement of quality of education to prevent "drop-outs" and (f) M&E for Year 8 learning and teaching (pp 50-51); the details are provided in Annex 5.

On the other hand, MEYS has been proactive to ensure that its future citizens have access to quality education and responsive to TKII (Education and HR is one of the eight strategic areas prioritized in TKII). The need to revise the curriculum was highlighted earlier at the National Education Forum (NEF – 2002), the ETSMP (2003) and ESMP (2006-2010). MEYS has produced **Tuvalu National Curriculum Framework (TNCPF)** in 2013 with the technical assistance and funding made available through its development partners EU and NZAid. TNCPF is guided by the regional framework, Pacific Education Development Framework (PEDF) and is committed to MDGs, SDGs and EFA. According to TNCPF, "The TNCPF proposes and Outcomes Based Curriculum upon which the design and development of the syllabuses, materials and resources, assessment and reporting, teacher training and professional development will be based" (p. 12). TNCPF proposes 6 cross cutting themes that are meant to be emphasized to varying extents at all levels of education:

1. Language and Culture
2. Student with special educational needs and inclusive education
3. Gender and equity
4. Information and Communication Technologies (ICTs)
5. Education for Sustainable Development (SRH/HIV Education)
6. Climate Change

Technology (TVET), Expressive and Creative Arts, Health and Physical Education and Religious Studies are identified with other academic subjects (Languages, Mathematics, Science and Social Studies and Sciences) under the seven mandatory "Learning Areas" throughout the schooling years 1-13. Tuvalu now needs to ensure that TNCPF is embraced in a holistic manner by all stakeholders and supported.

All the major policies, plans, frameworks and strategies regardless of its status as a draft or a cabinet approved document resonate similar ambition of a spiritual, sustainable and resilient Tuvalu with quality education and skills for life. Thus various policies and strategies are combined with overseas development aid to tackle the challenges for creating a sustainable livelihood for all Tuvaluans.

2.0 Commonwealth of Learning and its Role

The Commonwealth of Learning (COL) has been in existence since 1987 and mainly operates through voluntary contribution from Commonwealth countries. COL's mandate is to assist governments, institutions and organizations expand the scale, efficiency and quality of learning by using appropriate ODL and technology enabled learning (date ref p.12). Thus COL deploys relevant methodologies to promote formal, non-formal and informal learning to enable sustainable development.

According to COL's President and CEO, "COL has made a transition from "Learning for development" to "Learning for Sustainable Development" to align itself to the post-2015 Sustainable Development Goals" (p.4, COL Strategic Plan (2015-2021)) The focus of COL- SP (2015-2021) on learning for sustainable development and its mandate to promote Open and Distance Learning (ODL) as the only intergovernmental organization places COL in a unique position to support Tuvalu achieve its objective of providing quality education for sustainable development. COL made a transition from 'development' to 'sustainable development', to achieve outcomes and impacts by focusing on fewer activities such as quality learning for the longer term. This will enable COL with its commitment to assist Commonwealth countries and in this case, Tuvalu. In addition, *"COL recognises the role of education and learning as an important step towards achieving sustainable development"* (2015-2021 p. 7).

It should be noted that in 2014 COL conducted a Pacific Focal Points meeting whereby the Pacific Focal Points emphasised the need for "skills development and entrepreneurship, and capacity building in ODL and elearning" (ref p.9).

COL's strategic goals are:

- Human resource development in the Commonwealth
- Harnessing of ODL/OER and technology to promote equitable access to learning for sustainable development
- Promotion of Commonwealth experience

and priorities are:

- Development and promotion of open educational resources (OER)
- Education and training for women and girls (p.12)

COL's programme framework enables COL to work under two sectors, **Education** and **Skills** with Gender as a cross-cutting theme. The **Education sector** focuses on *Open/Innovative Schooling, Teacher Education, Higher Education and Virtual University for Small States of the Commonwealth (VUSSC)* to enable formal learning. The **Skills sector** focuses on *Technical and Vocational Skills Development (TVSD), Lifelong Learning for Farmers (L3F) and Technology-Enabled Learning (TeL)* to enable both formal and non-formal learning.

The results of Stakeholders' consultation and external evaluation as well as recommendations have been integrated into COL's programmes to suit target audience at international and grassroots level; it is evident from, COL's efforts to contextualize its programmes to suit different contexts such as Africa , Pacific Islands Countries (PICs) etc.

COL's belief in the need for focus on Policy-Technology-Capacity and research informed practices will work well for Tuvalu. COL evidently has the experience of testing different learning environments and technologies to suit local contexts and open educational resources in the area of open schooling. This is evident in its ability to have refined open schooling models with ministries of education and organisations. Its commitment and capacity to work in the area of TVE subjects using OER and educational technologies in both formal and non formal is useful for PICs and in this case Tuvalu. COL has the experience of promoting skills training through flexible and blended approaches

within the Commonwealth. Its focus on policy and development of suitable models for sustainable livelihoods is relevant for Tuvalu given the smallness, specific needs and vulnerability of this island nation.

COL recognises the need for capacity building in the area of training the teachers and teacher educators and development of OERs

The focus on school-based-in-service teacher training model works well in PICs as it firstly makes the trainee comfortable and secondly practicing training material is easier since all the conditions from the training environment nearly remain the same.

The four areas within COL's mandate and expert domain are reviewed next.

2.1 Open Schooling

The Open schooling (OS) concept has picked momentum in the PICs with a number of countries now adopting either complementary or alternative or integrative approach to OS. The important features and strategy for OS according to Haughey and Stewart (2010) as cited in Bakalevu (2013):

“The important features of open schooling – flexibility, openness, unconventional pedagogies, and use of information and communication technology ICT) – offer a new, viable alternative. Whichever of the attributes is most strongly emphasized – flexibility, openness, pedagogy or technology – will determine the form of open schooling” (p.17).

The complementary approach focuses on replicating the curriculum of conventional schooling system while alternative approach focuses on andragogy with a skills based learning process and integrative approach can be interwoven with the existing provision in the educational system. The alternative approach encourages acquiring TVET skills. Sir John Daniel (2010) in his keynote address emphasized the effectiveness of integrative approach owing to the fact that it could *“cater not only to its student body but also act as a catalyst and clearinghouse at a national level”*. However, this would depend on educational system of individual countries to decide upon which approach would suit them the best. COL has worked with various ministries of education and organisations to refine the open schooling model. As the concept of Open Schooling has evolved from wholly print-based to complementing it with multi-media, COL sees this as an opportunity to include OERs.

According to the Strategic Plan, 2015-2021, COL is committed to work with governments and institutions to

- Develop quality curriculum content in TVE subjects (aligned to skills needed for the world of work) using OER and various educational technologies.
 - Enhance the quality of conventional schooling through the introduction of viable and cost-effective models, including virtual schooling.
 - Improve learner retention and success rates through open schools.
 - Develop policy briefs and evidence-based research to enhance organisational capacity.
- (p.13)

Hence, there is clearly a commitment by COL towards TVET and technology enabled learning environments using appropriate OERs to provide an OS model that suits a particular country. The Open Schooling (OS) initiative of COL has worked in the area of development of educational resources and teacher training. Some of its projects organised by the Education Specialist in OS are listed as below (Mead-Richardson, 2014):

- Provide Open Educational Resources (OER) for primary and secondary subjects
- Train teachers in development of learning materials

- Assist with curriculum development to integrate vocational education in schools

Open Schooling has been embraced in PICs such as Vanuatu, Tonga, Kiribati, Solomon Islands and Fiji. Te Kura Correspondence College has twinned with Vanuatu and the partnership seems to have provided Vanuatu sustainability in running OpenSchooling programme. Amongst the PICs, Vanuatu, Tonga, Kiribati, Solomon Islands and recently Fiji have become member of the Commonwealth Open Schooling Association (COMOSA). COL's collaboration with various countries on Open Schooling initiative should assist Tuvalu in not only selecting the best Open Schooling model/approach but also in sustaining the programme.

2.2 Teacher Education

COL recognises teachers as the integral part of an education system and therefore gives teacher education utmost importance. According to the Strategic Plan, 2015-2021, COL's committed to support teacher education institutions to:

- Develop relevant context-based and pedagogically sound programmes for teachers and teacher educators.
- Improve institutional capacity to use ODL and ICTs effectively so that more teachers can be trained in academic and vocational streams.
- Improve the quality of teaching and learning to ensure positive learning outcomes.
- Develop OER materials and scale up the adoption and adaptation of OER. (p.14)

COL has been instrumental in conducting workshops and training for capacity building of teachers in various domains. Some teacher education activities organised by the Education Specialist in Teacher Education are listed as below (Mead-Richardson, 2014):

- Train teachers in ODL and learning resource development
- Provide OERs in teacher education

Evidently, COL has the relevant expertise and mandate to work across the spectrum of teacher preparation, teacher deployment and teacher support and utilise ODL in scaling up teacher training.

2.3 Technical and Vocational Skills Development (TVSD)

The TVSD programme targets quality and access to TVET ensuring gender equity. COL has the experience in utilizing flexible and blended (FaB) approaches to skills training for sustainable development and livelihoods. According to the Strategic Plan, 2015-2021, COL's committed to work in collaboration with organisations and stakeholders to:

- Train policy-makers, managers, and teaching and administrative staff in the FaB TVSD model to achieve scale.
- Assist in national and institutional policy development and strategic planning.
- Support the development of new curricula and learning resources in support of livelihoods in the formal and informal economies.
- Promote more women's participation in the TVET sector. (p.17)

The TVSD initiative of COL has been working in the PICs with various countries. Some of its activities from Education Specialist in TVSD are listed as below (Mead-Richardson, 2014):

- TVSD delivery strategy for outer islands of Kiribati
- Construction Management in Solomon Islands
- Community Development Worker Training in Samoa
- Skills training for women and girls in Vanuatu
- Support for Flexible and Open TVET in PNG

COL has used its understanding of Commonwealth countries context to provide technological solutions that work well for these countries. In light of high failure rates at Year 8,10 and 12 and unemployment, TVSD is a sound proposition for Tuvalu. Owing to its experience from many PICs in the area of TVSD, COL is positioned well to assist Tuvalu.

2.4 Technology-Enabled learning (TeL)

COL is committed to ensure the commonwealth countries are not left behind by making use of appropriate technologies. COL's focus on Policy-Technology-Capacity and research informed practices has enabled it to ensure the technology solutions are appropriate such as Aptus (Classroom Without Walls) and its newer version which addresses the weaknesses from Users' feedback. According the SP 2015-2021, COL's committed to work in collaboration with governments, industry and academic institutions to:

- Develop ICT in education and OER policies and strengthen policy implementation.
- Strengthen research on technology-enabled learning for evidence-based advocacy and decision-making.
- Develop relevant and innovative courses for developing 21st-century skills.
- Use technology-enabled learning for programme delivery.
- Promote the use of open technologies and OER for skills development.
- Implement tested models at scale and develop new models. (p.19)

The TeL initiative of COL has been working in the PICs with various countries. It has recently rolled out modified Aptus version in Vanuatu¹⁰ after user feedback on previous Aptus device. Therefore the modified Aptus should enhance user satisfaction. Such Action-Research exercises enable delivery of appropriate technological solutions.

2.5 Gender

Gender is the cross-cutting theme for all its programme sectors. COL is committed to ensure gender disparity is addressed through gender mainstreaming as its strategy. According the SP 2015-2021, COL's committed to:

- Harness the potential of ODL to expand access and improve learning outcomes for girls/women and boys/men.
- Support partners to integrate a gender equality perspective in their work.
- Provide technical assistance and support in the design and development of gender-responsive curricula and teaching/learning materials.
- Generate research and policy briefs to inform strategic directions in gender mainstreaming in ODL.
- Develop a gender mainstreaming model for further replication. (p.20)

COL acknowledges gender disparity can adversely affect men and boys for example women achieve higher educational qualification in Tuvalu while in other cases it affects women and girls such as lack of women representation in Kaupule in Tuvalu. This understanding helps COL to approach the issue of gender with caution and thereby making gender mainstreaming its strategy by default.

Gender mainstreaming is defined as:

"...the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all

¹⁰ <http://www.trr.vu/index.php/en/telecom-industry/universal-access/ict-programs-under-uap/moe-hands-over-classroom-without-walls-aptus-device-to-trr>

political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality". (UN Office of the Special Advisor on Gender Issues and Advancement of Women, 2001¹¹)

Tuvalu has participated in a gender mainstreaming stocktaking¹² exercise which is an indication of Tuvalu's commitment to gender issues. The stock take was carried out in six enabling environment for gender mainstreaming. These are (i) Legal and policy framework, (ii) Political will, (iii) Organisational culture, (iv) Accountability and responsibility, (v) Technical capacity and (vi) Adequate resources. The study identified a number of areas where efforts have been made and needs to be improved further:

- ✓ Building on existing government mechanisms such as Department of Women's Affairs (DWA)
- ✓ Capacity building for human rights-based approach as basis for gender mainstreaming
- ✓ Engaging men and boys to support gender equality
- ✓ Gender statistics to support knowledge development on gender issues
- ✓ Strengthen the advocacy role of Women's NGO

It was noted that commitment and words are turned into actions and concrete results for women and men in Tuvalu. Therefore, Gender being cross-cutting theme in COL's programme sectors, it provides assurance that Tuvalu's commitment to gender mainstreaming will be concretised.

The key findings indicate that COL has had significant impact in area of TVSD during the period 2006-2015 (COL Strategic Plan 2015-2021, Annex 5: Executive Summary, The Impact of COL, 2006-2015). According to SP 2015-2021, COL plans to have significant impact in 4-6 nations. Therefore, working closely with Ministry of Education in Tuvalu in an area such as TVSD where COL has capability to make an impact would be a win-win situation for both COL and Tuvalu.

3.0 Consultative Methodologies

Three different methods of consultation were employed to obtain the data for this study: document review, group meeting and individual consultations. A few meetings were carried out in Fiji prior to the visit to grasp an understanding of the situation in Tuvalu. Majority of the meetings and consultations were conducted during the 6-day in-country mission. Some individual meetings were conducted again in Fiji after the in-country mission and these were mainly due to the availability of the individuals. A list of guiding questions is given in annex 2.

3.1 Document review and analysis

The documents reviewed (Annex 1) were the ones relevant to this study: Tuvalu government policies, draft policies, reports and reviews of various initiatives, COL current strategic plan (2015-2021), papers, reports and presentations by COL, relevant documents by other crop agencies as SPC, IUCN and WorldWideWeb.

3.2 Individual consultations/meetings (Informal interviews)

The Tuvaluans living in Fiji and others who have been part of previous and/or current projects in Tuvalu were consulted individually.

During the six-day in-country mission, a number of individual stakeholders were consulted as scheduled by EdDep, MEYS. In some cases, the consultant approached or sent a message to reach

¹¹ UN Office of the Special Advisor on Gender Issues and Advancement of Women. 2001. Gender mainstreaming: strategy for promoting gender equality. <http://www.un.org/womenwatch/osagi/pdf/factsheet1.pdf>

¹² The stocktake of gender mainstreaming capacity of PICs is an activity under the Progressing Gender Equality in PICs (PGEP) initiative

certain individuals as advised or informed by Focal Point in Tuvalu (Director, EdDep); although some individual were referred to by the ones scheduled for consultation by the EdDep. A full list of individuals (with their details on expertise/position and affiliation) consulted is given in Annex 1.

3.3 Group meetings

The group meetings with teachers, education officials, team members of different projects were carried out during the in-country mission. These group meetings often took the form of a focus group meeting depending on the issues under discussions. The details of the groups (their professional background and affiliation) called for group meetings are given in Annex 1.

4.0 Current Status of Education in Tuvalu

Tuvalu's EFA review (2015) indicated that it had achieved all the goals but the quality of education remained a concern. Similarly 11 bottlenecks in the achievement of quality education were identified in MDG-MAF (2013). The quality of education is dependent on a number of factors including the government and community support, teachers, students and infrastructure. It was therefore deemed important that all stakeholders are consulted and visits made to different facilities. This section presents the current status of education and its challenges and potential based on these consultations and visits.

4.1 The Basic Issues

The Honorable PM Sopaga shared his vision of a prosperous, healthy and technologically advanced Tuvalu. He believes that "In order to tackle "Poverty and environment" we have to move away from fossil fuel" which is aligned with TKII NSSD (2005-2015) for Tuvalu's sustainable development. Lack of Affordability of fossil fuels appears to be the driving force towards Tuvalu's commitment to 100% Renewable Energy by 2025 for all its energy needs and rural electrification by 2020 (Figure 8). Moreover, energy availability influences quality education and livelihoods in small islands. Therefore, the Prime Minister views education as key to Tuvalu's sustainable development and acknowledged USP and Tuvalu's development partners' contribution.



Figure 8: The Government Building with solar panel on rooftop (Photo: Shikha Raturi)

There has been a significant change in the schooling system such that the Year 9 and 10 will move from secondary school to primary school from 2016. It would be interesting to see how it pans out and if this would impact the drop-out rates. In light of school "dropouts" and low pass rates at NYEE, TJC and TSSC, TVET skills play a crucial role and the country's focus is on outer islands.

Labour mobility was high on the agenda during the NSSD summit in Nov 2015 for TKIII. The enhancement of teacher quality and capacity building remain an area of need for Tuvalu and feature in the working document for TKIII. There is a lack of proper policies in various areas and there is a need for technical assistance for policy development.

The increasing numbers of unemployed youth/dropouts is a concern. The communities are concerned about their idle youth and have requested MEYS to look at the issue of youth unemployment/drop-outs. Efforts are being made to ensure that the youth is trained and included in human resource capacity for outer islands; however, MEYS has its limitations on how much it can do on its own. The CTCs offer languages (Tuvaluan and English), Math and Enterprise education together with skills identified by each island's community. The CTCs currently offer skills that are in demand in each island; however, it is not running well owing to

1. lack of skilled teacher in the specific TVSD area

2. lack of coordination between school and Kaupule.

Some CTCs where skilled teachers are available have seemed to work fine for certain duration of time. The CTCs are facing issues owing to their sustainability. A need for stronger partnership between Kaupule and MEYS was emphasized by the Kaupule representative, MEYS and the teachers. The communities have also asked MEYS to ensure that they set up a pathway for school completers and school dropouts both in term of TVSD skills and competency.

Most of the TVSD programs in primary schools are non-formal and run by communities and spear-headed by Kaupule – the main focus is traditional knowledge systems and often retired peoples such as sea-farers, elders are asked to teach different skills.

There are some exciting developments taking place in the region of the South Pacific and Tuvalu being part of the region is a beneficiary to such developments. MEYS is working with regional programmers such as European Union Pacific Technical and Vocational Education and Training (EU PacTVET) and other ministries to prepare TVET modules (as determined by the project) and MEYS will facilitate it; this is an area where COL's assistance will be useful.

One such partnership has emerged through a program funded by DFAT and implemented with the help of UNICEF with MEYS. Achieving Education for All - Tuvalu Programme (AEfATP) is a four year programme to support MEYS (2011-2015); it is funded by DFAT (3.6 million USD and managed by MEYS with technical assistance provided by UNICEF. MEYS identified key strategic priorities from TESP II which in turn is aligned with TKII. The goal of AEfATP is to contribute to MEYS efforts to ensure children benefit from equitable access to QA. The four key outcomes of this program are:

1. Establishment of School based management system in ECCE, Primary and secondary school
2. An increase in access of quality Early childhood education services
3. Establishment of a functional Education Management Information System (EMIS)
4. Development of quality teaching resources to improve practices in teaching English, Math, Science in lower secondary (year 7-8)

In the process of training teachers, it was found that they lack content knowledge and therefore there is an urgent need for teacher education and continuous professional development. Considering the program is about to end (March 2016), AEfATP together with MEYS will be looking at developing an exit strategy to address the issue of teachers' content knowledge in late 2015-early 2016. It has been suggested that emphasis should be on training the master trainers in MEYS so that they can take over and assist the teachers with content knowledge as one of the key areas in teacher education.

4.1.1 ICT infrastructure

Similarly, MEYS is looking at using an intranet environment with a server and computers in a computer room. The server is loaded with a cloud based RACHEL system which was set up by a MEYS officer in 2013 - it has been tested and used since then. They would also like to look at the option of Aptus as another server. However, the plans for putting educational resources on a server to be used by teachers and students would first require teacher training. The same servers could be also used for storing training modules and TVET related resources.

Nauti Primary school in Funafuti has its computer lab (Figure 9) equipped with 40 computers to cater for Year 7 and 8 and 2 tablets and 2 laptops; this awaits training of teachers to use the materials meaningfully in their learning and teaching practices.



Figure9: Computer Lab in Nauti Primary School (Photo: Shikha Raturi)

A mix of TVET skills training is currently being offered in the area of fabrication and welding, carpentry and joinery, applied computing and agriculture (horticulture) by either FNU or APTC or USP-TAFE (USP Tuvalu Campus). There is a certain degree of satisfaction towards the courses being offered by USP TAFE in terms of its quality and addressing the skills needs of individuals. DOE views Pac TAFE programs as industry oriented such that these are providing theory together with practice. The courses offered by APTC only target individuals who are already employed and help them upgrade their skills but it does not cater for unemployed youth.

Tuvalu has committed itself to adopt the Pacific Qualifications Framework (PQF) as its National Qualifications Framework (NQF) for the TVET program. It is not only important to see that training is being provided but education plays an important part in providing competency and aligns with a national framework and then in turn aligns with the regional framework to facilitate mobility of labour. So, there is a need for TVET skills training to be aligned to the PQF. It is, therefore, imperative that regional initiatives are contextualized such that initiatives such as APTC can tailor make skills development programmes to school leavers and drop outs.

4.1.2 PacTVET

EdDep acknowledges that EU PacTVET focuses on climate change and sustainable energy and while these concerns are being addressed through EU PacTVET, EdDep is looking at developing teaching modules which can also be used in the classroom. The idea is that these courses will be modularized for future use in schools. Fiji Higher Education Commission (FHEC) is looking at the qualification side of training such that when EU PacTVET will offer skills training, the trainees will receive a certificate that is recognized not only in Tuvalu but also within the region. The EU PacTVET programme is working towards country priorities. EdDep is currently looking at how to utilize EU PacTVET multi-sectorally in order to cater for unemployed youth.

EdDep sees it as an opportunity to enable development of curriculum, train and procure resources such that a school could run a project in this area and provide skills to the students. Therefore, the project will enable Tuvaluan climate refugees to move with skills. EdDep considers it useful for Tuvalu to have EU PacTVET and COL work together.

4.2 Infrastructure

4.2.1 The Energy Sector

The energy plans in Tuvalu indicate that by 2020, Tuvalu will generate 100% electricity through Renewable Energy (RE). The current status of 5 islands is as follows:

Nukulaelae - 60% RE

Nukufatau - 60% RE

Niu - 60% RE

Nanumae 90% RE

Nanumaga 90% RE

Vaitupu is expected to be energized by end of November' 2015 with 90% RE while Niutao is also expected to be 90% RE by Dec. 2015.

Tuvalu has been making steady progress in improving the quality of social and school life for children through various RE projects. A review report of International Union for the Conservation of Nature and natural Resources (IUCN) project revealed the impact on having the lights (through solar installation) at nights on the safety issues of female students in the school female dormitory and street as well as learning opportunities for all students in MSS, Vaitupu (IUCN, 2011). This report further discusses changes in parents' attitudes and confidence in sending their daughters to this school feeling a well-lit up environment was safer for them.

"The island of Niulakita and Funafala will be powered through Stand Alone Solar System for all households, schools, churches and community halls. The Government of the day has plans to set up a Primary School in Funafala. There are families living on Funafala currently 10 families living on it with a church building" (Maafalu Lotolua, Pers. comm.)

Tuvalu has a 500kW PV system installed in late August 2015; 350kW system was at the site (TEC) (Figure 10) while hospital has a 75 kW and marine ware house has 75kW in the island of Funafuti.



Figure10: A 350kW system at the Tuvalu Energy Corporation site (Photo: Shikha Raturi)

There is a separate PV system (40kW) installation for MSS on the island of Vaitapu. *"The PV capacity does not fully meet the load at the school and thus need additional capacity to fully meet the load at the school"* (Mafaalu Lotolua, Pers. comm.).

Occasional breakdowns in the outer islands comprise problems with switches (isolator) and inverters; these are maintained by the contractor CBS based in Fiji and Powersmart based in New Zealand. The RE expert commented, "With the spread of RE it is important that qualified technicians are available for maintaining the systems. Hence, TVET programme is important" (Atul Raturi, Pers. comm.)

The funding from the World Bank and European Union will help Tuvalu achieve its 100% renewables target. The World Bank is supporting the main island that is Funafuti and the European Union will fund Nui, Nukufetau, Nukulailai.

“All the outer islands will be supplied with new generators by the end of 2015. Also new generators will be supplied in 2016 to Nukulaelae, Nukufetau and Nui as part of Tuvalu’s sustainability plan”. Overall the country has achieved 48% target and it plans to increase it to 60% by 2017 and finally with more funding is required to achieve 100% by 2020” (Maafalu Lotolua, Pers. Comm.).

However the point to be noted is that despite the electricity plans, electricity supply is limited in the outer islands. For example, electricity is available from 6a.m. to 12 noon and then 6p.m. to 12 midnight in Vaitupu, the largest island in Tuvalu, however, Funafuti has 24 hours electricity supply. It was a general feeling that rationing of electricity affects the livelihoods of each island. Government of Tuvalu report (2015) on its Intended Nationally Determined Contributions (INDC) indicates a combination of power systems (diesel and solar) will improve the situation.

4.2.2 Information and Communication Technologies

The Tuvalu Telecommunication Corporation (TTC) is optimistic that internet services will be delivered to the whole of Tuvalu by 2017 by Kacific Broadband Satellite (KBS) owing to the agreement signed in mid 2014 (KBS, 2014). KBS aims to provide services to schools and health on each of the nine islands with lower costs than current rates. The issue of available bandwidth will depend on how much Tuvalu can afford and the plans will be finalised in the meetings with KBS in December 2015 in Tuvalu. KBS is working with JSat and plans to work on Ku band first followed by Ka band next considering it is prone to rains etc. Tuvalu plans to extend Asia Broadcasting Satellite (ABS) and currently it has only one antenna. It is hoped that next year TTC we can provide internet connectivity to MSS and is planning for the other islands too. Nui and Nukufetau are next in line for ABS antenna. Though C-band is considered a good choice for Tuvalu since it is less affected by rains and bad weather.

TTC hopes to see KBS serving the residential areas and schools, TMTI, medical facilities considering it is cheaper. However, ABS will provide the telephone system. Currently, TTC have antenna which work on links to Funafuti and Vaitupu and plans to extend it to other islands later. The use of One Web satellite is under consideration owing to its low cost. KBS will offer 80 Mbps in the starting and ramping up to 150 Mbps after four years (KBS, 2014). However, the agreement provides TTC freedom to increase the bandwidth in the increments of up to 50% at anytime which implies that KBS can provide TTC a capacity up to 225 Mbps within these four years. TTC is dependent on the government for one ABS antenna for one island costing 80 grand USD. On the other hand, TTC is confident that it can handle one antenna for up to USD100,000 even without the funding and internet with the help of KBS provided to the one island.

There are other development partners who are also assisting in the energy sector. NZAid had also sent a TA to conduct a study internet and telecommunication systems around the same time as this study. On the other hand, World Bank would like mobile coverage on all islands for voice and data, but TTC currently sees it as a difficult option owing to the need for infrastructure for telecommunications towers etc and therefore thinks it is an expensive project (an estimated cost of 4 million USD) unless funding is available for this too.

During this study, TTC launched its 3G services in the Funafuti but not the outer islands (Figure 11). Currently, TTC make up to 80% of its revenues in Funafuti alone but they are unsure of how it can perform and serve outer islands. The internet on outer islands is slow (1.5 Mbps) and proving an expensive proposition to maintain especially with increasing costs of copper wire. Therefore, TTC is

considering wireless network throughout the nine islands and establish a core network before they can extend 3G to outer islands. TTC is depending on the agreement with KBS and is confident that its ICTs will improve by 2017. The ICT Department of Tuvalu government also commented on the aim for internet availability in the whole country (all nine islands) through KBS agreement by 2017. The current costs of internet are expensive, slow and sporadic, for example a card for 250MB of data would cost approximately 10AUD (approx. 10CAD) in Funafuti. The outer islands are even more expensive and slower.



Figure11: The 3G launch by Tuvalu Telecommunication Corporation (Photo: Shikha Raturi)

The International Telecommunication Union (ITU) project¹³ agreed upon during the Small Islands Developing States (SIDS) - 2015 conference enables setting up of e-centres with devices and internet coverage on two islands in the case of Tuvalu. The two northern most islands Nanumaga and Nanumea have been chosen for this project. Each island will have an e-centre and be equipped with 10-15 computers, a webcam and a printer; this equipment has already arrived in Tuvalu but the exact numbers of computers could not be confirmed. The ICT Department awaits delivery of the satellite dish (C-band) and will then work closely with TTC to deploy the equipment and train people on the two islands.

The ICT Department provides equipment training and technical support to all the government and business houses including internet services and network upgrades. In the past, ICT has encouraged its staff to pursue a course to acquire ICT skills through the Australian “International Computer Driving License” (ICDL). It is worth noting that COL has a freely available Commonwealth Computer Navigator’s Certificate (CCNC) to match ICDL and mitigate the high cost of ICDL. Australian ICDL comprises three tiers, Standard, basic and advance. ICDL was offered to all civil servants, 200 enrolled and 50 plus completed first phase I, about 15 have moved to basic and 3 completed basic and moved to advanced level. The ICT Department has been tasked to develop a training package to be used during the project implementation but time and manpower is an issue. ICT Department is contemplating development of self-paced training models and is looking for technical assistance from development partners. This is an area where COL could assist.

¹³ http://www.itu.int/en/ITU-D/LDCs/Documents/Programme_SIDS_BBB_Final.pdf

5.0 Case Studies

5.1 TVET in School

TVET is currently being run in both primary as well secondary schools.

Community Training Centres (CTCs) have been established within the primary school with the assistance from Kaupule in each island except for one island. The government provides infrastructure and the Kaupule identifies the skills required by the community and the teacher to teach these skills. It was felt that a good communication between school and Kaupule is key to the success of CTCs.

Nauti Primary is a large primary school in Funafuti; it is the largest school amongst both primary and secondary in terms of its enrollment and facilities. The school has offered a number of different subjects in TVET depending on the availability of the teacher and resources in the past but there is a need for a systematic approach to TVET skills offering.

Nauti Primary School is the school chosen for the government's Elearning pilot project. This project followed a series of consultations and visits by USP Elearning team in 2014 as well as lessons learnt from MSS learning project earlier. Later, more assistance from USP experts in the area of IT and LMS was sought so Tuvalu's MEYS team could understand the server specification and Moodle installation process. During the workshop conducted by the USP Elearning team, they shared education resources such as Khan Academy, British Council resources etc and Tuvalu's Elearning expert shared "Rachel" with the USP team. The solution suggested by the USP Elearning team matched with Tuvalu Elearning expert's project proposal. The Elearning project comprises setting up a computer lab via N-computing where the central server houses a digital library (Rachel) and a digital classroom (Moodle). Rachel has a number of educational resources and it also provides options to add more material to it. Therefore, it was considered best to upload "Rachel" in its current form as the starting point for this digital library. The equipment for the elearning project have already been set-up but the training is yet to take place. Therefore, the computer lab is currently functioning as a place for teachers and students to use computers to type and carry out research.

The well-resourced computer laboratory at Nauti Primary indicates government's willingness and vision to integrate ICT in learning and teaching and it also provides a place for the provision of additional digital resources.

Motufoua Secondary School (MSS) is a government run secondary school which is co-educational and offers boarding facilities. Out of a total of 462 students, there are 31 students studying TVET courses (14 girls and 17 boys) in MSS in 2015. Schools such as MSS offer a pathway in TVET to children to some extent as the teachers teach different skills in carpentry & joinery (CJ), fabrication & welding (FW), horticulture (HC) and information technology (IT) for example:

Teachers from technology department teach the CJ and FW

Teachers from agriculture teach HC

Teachers from IT department teach IT

Other subjects like language and ethics are taught by teachers who teach academic subjects.

The students study these subjects and work through their assignments in the form of projects and practical. These are franchised courses from FNU. Printed material is supplied by FNU and taught by MSS teachers and students sit for some exam too. However, the major challenges are attitude (teachers and students, as well as the community) and facilities in the schools. Suggestions were made to conduct TVET awareness sessions with communities and teachers. Also there is a need to establish TVET as an opportunity that provides students work in order to change the stigma surrounding TVET amongst all stakeholders. A change in teachers' attitude is considered crucial as it

influences students in the school. A need for specialized teachers for TVET was emphasized and the need for TVET training was also highlighted.

5.2 TVET as Private Enterprise

The **Marretta Kabane Halo (MKH) School** established in 1996 has been instrumental in providing secretaries and book-keepers to the work-force in Tuvalu. The school was set up to assist school “drop-outs” and has been successful in training some of these “drop-outs” since 1996. The school offers two certificates and covers seven modules in 6 months. It focuses on teaching Microsoft Word and Excel. The certificate 1 covers shorthand, typing and computing (4 months) and 2 covers accounting and book-keeping. The students in the school are generally school leavers and the current cohort never got an opportunity to attend Community Training College (CTC) as they left school in 2009 when there was no CTC; more than half of the current cohort is from the outer islands – meaning they have to stay with relatives and parents have to cover the cost of their transport and accommodation. The Halo couple has a great sense of accomplishment as they see their students getting employed after the training at MKH - some of whom find government jobs (Figure 12).



Figure 12: Mr. Halo Tuavai and Mrs. Marretta Kabane Halo with the current cohort of 2015 (Photo: Shikha Raturi)

The medium of instruction in Tuvaluan but resource material is all in English. The students cannot take these resources away from the school but can read and practice while they are in the school (Figure 13). The students shared that due to limited options available, people often end up doing what is available and not necessarily what they would prefer to learn. The loan scheme (Provident Funds) by government has helped to sustain the school as the students get a loan from government - this has helped the school increase numbers again otherwise enrollments had dropped as low as 3-4 per batch. The qualification at MKH is recognized by the Tuvaluan government. However, the owners would like to see that these students get opportunities to upgrade their skills and obtain further qualifications. A lot of graduates from MKH are doing USP Pacific TAFE at USP Tuvalu centre pursuing courses such as management. However, some cannot go for further studies because of lack of funding - some are interested in sport, some don't do anything, some want to start up their own business (business entrepreneurial skills). On the other hand TMTI trained graduates cannot always find a job as a seafarer. Such was the case for a young man at MKH who was learning new skills to obtain certificates 1 and 2 to increase his job prospects.

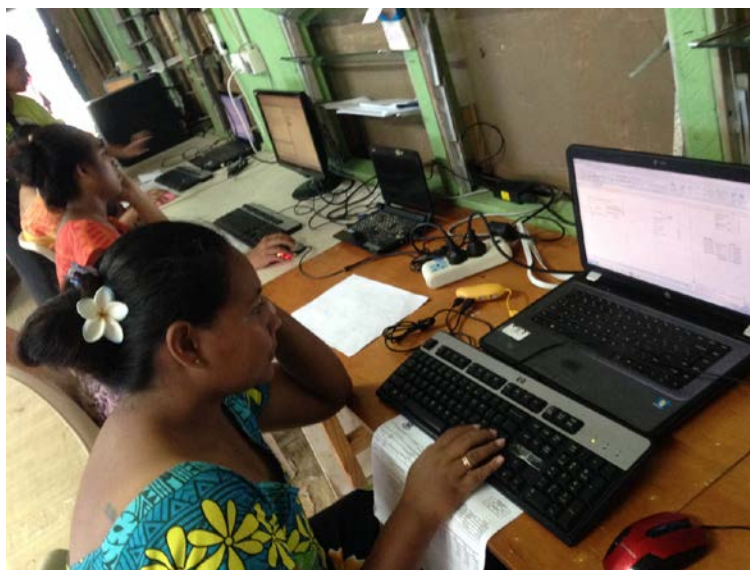


Figure 13: A student learning Excel at MKH School (Photo: Shikha Raturi)

Of the students consulted, most have a computing device at home, they all surf the net and everyone has a Facebook account and often engage in video Skype to communicate with friends and families overseas. This indicates that youth is embracing technology to some extent and they will continue to use technology if they find it a satisfying experience.

5.3 TVET as Government Enterprise

Tuvalu Maritime Training Institute (TMTI) is located on a small island (about 15 minutes boat ride) from Funafuti. Discussions with the instructor and students suggest TMTI is a fairly well equipped training facility which also assists the country with excellent maritime employment opportunities. It not only provides good income but also provides “drop-outs” a second-chance to do something worthwhile. However, a few TMTI graduates were found to be waiting for an employment opportunity and some decided to move on to learn another skill to increase employment opportunities for themselves. Tuvaluan mariners are considered to be expensive for merchant navy companies due to the cost of transporting them from Tuvalu to join their ships.

The institute conducts an entrance test as the qualifying exam but there are no minimum entry qualifications enabling school dropouts to enter TMTI provided they pass the entrance test. TMTI has 3 intakes per year and takes 25 cadets per course with a recent opening for 5 female candidates per intake since 2013. About 60 students graduate every year with a certificate of competency in various departments of the ship - catering, engine and deck. The students go through rigorous training studying one course in 3 stages (Junior, Intermediate and Senior) and each stage is 4 months long. Students are given three attempts to clear each stage and on the whole it is a 1 year programme.

Out of the three girls admitted in 2013, only one managed to graduate. The only female seafarer topped the programme winning SIX prizes (out of seven areas) Engine, Electricity, Tanker, First Aid, English and Catering; she missed out on Deck; Ms. Foma Kalala is proud of her achievement and happy to share her “Certificate of Seafarer” (Figure 14).



Figure 14: Ms. Foma Kalala, TMTI's first female graduate sharing her credential (Photo: Shikha Raturi)

It was noted that there is a need to increase the number of females in the cohort to provide a more conducive environment for female students for two reasons. One was that having more female student would not attract unnecessary attention from the male students and secondly having more females would enable them to provide support to each other. However, the parents are now reluctant to send their daughters to TMTI owing to the two unsuccessful female candidates' cases. The females generally do not feel comfortable and safe being in minority amidst several men.

The Institute currently offers training to the crew. Plans are underway to upgrade it to a school level such that the crew can be promoted to cadet officer otherwise these crew/seafarers have to go to Australia, NZ and Fiji. This overseas training involves onboard simulation training and is expensive. Therefore, they are seeking ways to provide cadet officer training within TMTI.

TMTI is equipped with a total of 10 computers and currently teach basic computing skills. They are looking into extending skills training to welding, refrigeration, marine engineering and advance engineering and negotiations are underway to offer Fabrication & Welding and Carpentry & Joinery together with some more skills. However, some facilities will need to be improved for instance the lathe machine which is unused owing to its poor condition. Similarly, there is a proposal to introduce a course in Hospitality and the recommendation is to merge hospitality with catering in TMTI.

There is a general notion of TVET courses being better served on the main island of Funafuti or TMTI instead of its current location at MSS in Vaitupu. TVET courses started in Vaitupu (2012) and from 2013 it started running in Year 13 campus at USP Tuvalu Campus in Funafuti and since 2015 Year 13 moved back to Vaitupu.

There has been consultation with Education Quality and Assessment Programme (EQAP; formerly SPBEA then SPBEQ) to establish a national university in Tuvalu which would cater for programs such as TVET etc. TMTI is being proposed as the college which would be the main focus of this "proposed national university". The Education Department is looking at the process of qualifications framework. A Cabinet paper has been approved with the proposal of the Pacific Qualification Framework (PQF) as Tuvalu's NQF. It also resulted in Cabinet approving the setting up of National Quality Assurance (NQA) agency to oversee the qualifications framework and future plans pertaining to the concept of a 'National University'. To this date, there has been a workshop to discuss the concept of "National University" which has been generally well received. The NQA team member reiterated that the emphasis of the "National University" concept is to ensure there is a proper pathway for TVET – which suggests it should rightfully be called a polytechnic.

5.4 TVET as a Development Partner Project

Horticulture Crop Development Project (2011-2014) and Horticulture Expansion Project (2016-2020)

The Taiwan International Cooperation Development Fund (ICDF) project in Tuvalu focuses on agriculture in particular growing vegetables. The project ran for first four years from 2011 to 2014 (Horticulture demonstration farm) successfully. The project was aimed “to assist with and demonstrate technologies associated with vegetable and fruit cultivation and production as part of a wider promotion of the consumption of fruits and vegetables. The specific, main aims of the project are to improve production, reduce imports, expand home gardening and promote the consumption of nutritious lunches through the operation of school vegetable farms.” (Taiwan ICDF site¹⁴). During this phase Taiwan ICDF provided Taiwan Technical Mission to work with the Ministry of Natural Resources, Land and Environment in Tuvalu. The Tuvaluan government has approved the outcomes of the demonstration farm. Thus, the initiative has been given an extension of another five years (2015-2020: Horticulture Expansion Project¹⁵) with the farm being extended to the largest island, Vaitupu.

The meeting with the Taiwan Technical Mission team in Tuvalu explained the Expansion project and its plans for sustainability of the project. During this expansion phase, the team is looking at consolidating different efforts. For instance, a previous project (Global Climate Change Alliance: Pacific Small Island States (GCCA:PSIS¹⁶) project) equipment is being handed over to the department of Agriculture (land and machine) and Taiwan Technical team is looking at how they can use it to enhance the Horticulture Expansion Project. In the expansion phase, Taiwan ICDF is also making an active effort to ensure that project can be run and managed by Tuvaluans. For instance, since 2015, the project has been handed over to the department of Agriculture and ICDF through Taiwan Technical Team continues to provide the technical expertise and capacity building together with monitoring of the operations in the country such that the project is sustained beyond 2020. There are 7 personnel from Agriculture Department and one handling the administrative work together with 8 workers in the farm making it a total of 16 Tuvaluans now working closely with the Taiwan Technical team in Tuvalu. Several activities including training, home-gardening skills, and marketing have been conducted by the Taiwan Technical team (Figure 15). The efforts by Taiwan ICDF are generally appreciated by Tuvaluans and the government. It should be noted that the previous Aquaculture project¹⁷ (2011-2013) is non-functional as it is proving a costly exercise for Tuvalu to run and maintain.

¹⁴ <http://www.icdf.org.tw/ct.asp?xItem=5291&ctNode=30041&mp=2>

¹⁵ <http://www.icdf.org.tw/ct.asp?xItem=29117&ctNode=30041&mp=2>

¹⁶ <http://projects.pacificclimatechange.net/projects/global-climate-change-alliance-pacific-small-island-states>
<http://projects.pacificclimatechange.net/gcca-psis-tuvalu>

¹⁷ <http://www.icdf.org.tw/ct.asp?xItem=5292&ctNode=30041&mp=2>



Figure 15: Information board at Horticulture Project displaying photos of various activities including training
(Photo: Shikha Raturi)

The ICDF team in Tuvalu has been providing training courses to Tuvaluans with no restrictions on eligibility for training since its first phase of the demonstration farm. These training courses are general in nature and look at the whole process from preparing the soil to preparing seedlings up to harvesting. It involves how to transfer seedlings to soil bed or container, crop management as well as disease and pest management (Figure 16-17). The focus during the training is on "learning by doing" and paper based resources are given to the trainees. Currently the ICDF Tuvalu team is working on making videos but expressed interest in joining hands with any other organization/unit (such as COL) for the finalisation of these videos in terms of editing and proof reading.

The ICDF Tuvaluan team has learnt that growing vegetable is not only challenging but also the soil conditions and climate make commercial farming a difficult proposition. A combination of various factors such as lack of rich soil, shallow top soil in Funafuti (but this is better in Vaitupu) with coral reef underneath, rising salty waters, salty air (which kills leaves), lack of sufficient organic manure (the only available component are pig manure and coconut trees for compost production and thus dependency on imported fertilizer) contribute to difficulty in making farming a viable commercial business. However, vegetable farming is imperative for Tuvaluans' healthy land sustainable livelihood which is otherwise dependent on expensive overseas market.

It may be useful to note at this point that GCCA:PSIS project also engaged in activities similar to Taiwan ICDF project such as growing climate-ready crop varieties and conducting workshops and trainings¹⁸.

¹⁸ http://www.pacificclimatechange.net/components/com_booklibrary/ebooks/Workshop%20report-%20Agroforestry%20Training%20in%20Tuvalu%207-14%20Oct%202014.pdf



Figure 16: First stage of vegetable growing (Photo: Shikha Raturi)



Figure 17: The Greenhouse for vegetable garden after transplanting seedlings to vegetable bed (Photo: Shikha Raturi)

In its efforts towards sustainable vegetable farming in 2016, the ICDF technical team in Tuvalu will be looking at testing Tuvalu climate tolerant varieties of vegetables, better horticulture techniques and new varieties of vegetables. Once successful, the team will then train Tuvaluans in this area too. The Taiwanese Project manager's assessment reveals that Tuvaluans appreciate the importance of vegetables in their diets and desire for vegetables and this would in turn impact the market needs. The team alluded to "demand and supply" playing a role in the sustainability of the horticulture initiative. There is a need for more awareness for the importance of fruits and vegetables in daily diet of Tuvaluans. Although, the numbers of home gardens for vegetables have also increased, this could be an indication of some awareness raised. Overall, the efforts are being made by the Taiwan technical team in Tuvalu to ensure that the horticulture farm generates money to sustain itself in the long run. It is believed that project will be eventually run by the Tuvalu government's Agriculture Department. Projects like this mobilize and motivate the citizens in a country and this can be seen in Tuvalu too.

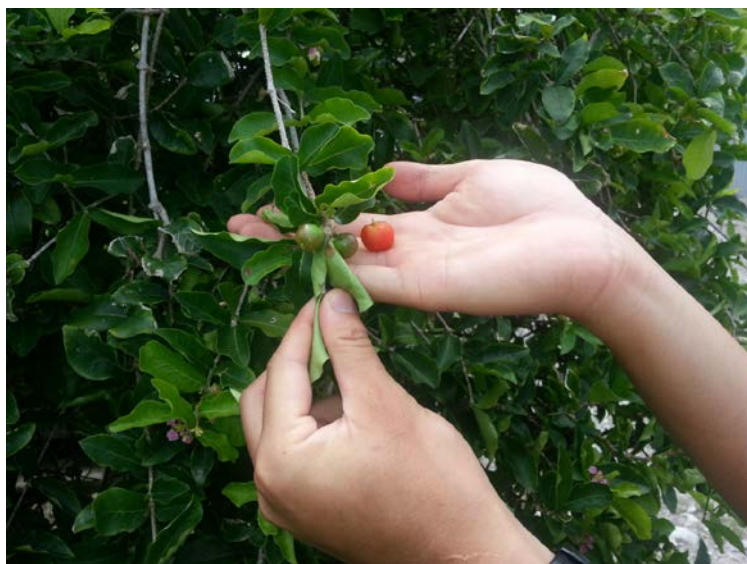


Figure 18: Growing berries (Photo: Shikha Raturi)

The meetings with the Agriculture department shed light on this initiative from Tuvaluan perspective as well as provided agriculture plans by the government. The general feeling was that the project is helping youth to get work, keeping Tuvaluan youth occupied and trained especially in Funafuti. The Agriculture Department has been instrumental in enabling school leavers get a 2 months training and considering the training takes place 3 times a year, they have option of doing it during suitable time-periods. All the outer islands have a farm on their island and some trainees have gone back to assist on these farms. The Taiwanese farm serves as practice site for these trainees as they learn best 'by doing'; the farm was considered an excellent experience for the trainees.

However, there are limitations to what the Agriculture Department can do. While Agriculture Department provides trainers (they have three people training in the three areas), MEYS provides a certificate. There are no text books and trainees are taught the basics making use of handouts, chalk and talk approach followed by practical lessons in the Taiwanese farms. It is worth noting that COL has OERs in Horticulture produced in Samoa. At one stage in 2014, the Agriculture Department engaged in providing some night classes too. Some of topics covered in these trainings are pest and disease, how to grow and look after the plants and animal health.

Moreover, there is no further training available for the trainees, while there is interest shown in doing advanced courses.

The Agriculture Department is looking at a "Training of Trainers" model to sustain the Horticulture Expansion Project but the plan depends on the availability of funding from the government. There is a dire need for capacity building in the area of agriculture and 7 vacant positions in the Department is an indication of lack of capacity. The Department of Agriculture sees a need to upgrade the trainees employed in the Taiwanese farm. The Department is considering a certificate in horticulture as a way forward. Open and flexible learning could be considered although the Department of Agriculture can help with teaching through OFL as some are qualified in the area of agriculture but would require assistance with ICT integrated pedagogy training.

There is scarcity of vacant land for agriculture in Funafuti. However, there is land available in Vaitupu as well as 2-3 qualified teachers in MSS, who can assist in the offering of advanced agriculture courses through OFL. The plans for these advanced trainings in agriculture are aligned with TKII as well as the draft TKIII.

5.5 TVET as Game Changer

A few multi-multi-million dollar projects for PICs can be a game changer in the area of TVET considering its potential to assist Tuvalu with its vision of sustainable livelihood by building capacity and resources simultaneously. For example, projects such as Coping with Climate Change in the Pacific Island Region (CCIPR) program, GCCA:PSIS project, Adapting to Climate Change and Sustainable Energy (ACSE) component one have already have some success in Tuvalu as shared by Tuvaluans themselves; they consider these projects have assisted them in many ways to enable sustainable livelihoods. The EU PacTVET project is the component three within the broader Adapting to Climate Change and Sustainable Energy (ACSE) programme (Annex 5). The EU PacTVET is of interest as it has carried out “Training Needs and Gaps Analysis” study and now moving on to its implementation stage. The EU PacTVET study together with discussions with EU PacTVET Co-ordinator and Tuvalu Country Co-ordinator should inform this study of the areas where synergies can be established and duplication avoided.

The EU PacTVET study has identified a number of areas for training needs (Hemstock and Menuella-Morris, 2015), however, the focus for Tuvalu is on biogas energy and food safety. The EU-PacTVET project is working closely with MEYS and Department of Energy. The plan is to utilize digesters for biogas and work with individual families as opposed to previous efforts by other development partners. The focus is on training through resources made by the EU-PacTVET team and training will be delivered either online through USP-Tuvalu campus or packed on individual laptops (in the absence of internet facilities). The EU-PacTVET Coordinator commented that in the case of Tuvalu, though the training will only focus on biogas and food safety, there will be resources available in a number of areas such that if Tuvalu is interested they can make use of these. The training resources will be released under the Creative Commons license but the specific license is yet to be finalized. Currently, a portal is being developed and hosted by SPC and its mirror site will be at USP; it will be accessible to all institutions in the regions.

Previously, EU-GCCA project introduced biogas cooking using animal (pig) manure in Nanumaea with 4 digesters and Nanumaga with 7 digesters and 5 to be installed soon (owing to project extension till 2017 and another 1 million Euro has been given by EU-GCCAP for the extended phase). It is felt that the community approach taken of GCCA project may not have worked well and therefore, EU-PacTVET plans to work with individual families. On the other hand, the Department of Agriculture is applying to FAO for 40 more biogas units for domestic use and another 60 for aqua forestry.

The EU-PacTVET Tuvalu team on the ground thinks that through a good partnership with department of department of Energy and MEYS and joining hands with various entities during the training, the project will be successful. Therefore, EU-PacTVET plans to deliver training through TMTI, MSS, and Public works, Agriculture. Accreditation of the training course is high on the agenda and therefore, the EU-PacTVET committee is working closely with Education Quality Assessment Programme (EQAP) and Fiji Higher Education Commission (FHEC) as well as Sustainable Energy Industry Association of the Pacific (SEIAPI) which will provide a regional qualification for all the training that will be carried out. It was pointed out that it is the first time the region is developing qualifications on Climate change and Disaster reduction and disaster risk management. It is worth noting that COL has a disaster management course from Virtual University for Small States for the Commonwealth (VUSSC).

The Government of Tuvalu has a national commission that all training must be accredited by national body - so it was agreed by the Cabinet to establish a national body for all the training done by this project to be accredited by a national body. Currently they give a certificate of participation with the hope that USP Pacific TAFE might accredit it but this needs to be discussed further with firm commitments by various partners. Since 2003, approximately 600 people have been trained on biogas which seems to have generated awareness towards biogas. Other development partners in

Tuvalu have been Alofa Tuvalu, Private funding, UNDP small grant, Funds Pacific, EU Global Alliance project The EU-PacTVET project recognizes the need moving away from ad-hoc training to skills and competency based approach.

Another point worth considering is the number of resources (paper-based and electronic) created by these projects such as GCCA: PSIS, CCPIR. Although CCPIR focused only on three of its areas in case of Tuvalu (Mainstreaming climate consideration and adaptation strategies; Implementing adaptation and mitigation measures; and Sustainable Energy Management), it produced some resources on request from MEYS. CCPIR materials comprise 16 detailed, Pacific-related illustration flipcharts and an accompanying teacher guide¹⁹, translation of a children's storybook into Tuvaluan vernacular language together with training of 30 teachers in Funafuti in June 2015. The teacher training focused on how to integrate climate change into their teachings. The resources produced are readily available on the SPC portal²⁰ and these could be a part of any course modules that may be developed for Tuvalu or any other PIC.

Considering Tuvalu has a number of educational resources produced by various agencies, it would be worth drawing up a directory of relevant available materials which could be developed as OER. It would be appropriate to have a national OER policy which requires DPs to ensure all resources are produced as OER.

6.0 Quality of Education

More than infrastructure, the quality and number of teachers and the teacher:pupil ratio were considered important variables in determining the quality of education. The modified focus group meetings with teachers and students together with education officials at MEYS and meetings with officials in different government offices offered some explanation on TEMIS data and insights into quality of education.

6.1 Student Achievement and Teacher Support

The pupil-teacher ratio for all islands except for Niutao and Nanumaga has decreased for the three years (2012 to 2014). This decreased teacher pupil ratio (Figure 19) not only offers an explanation on low pass rates over the three years (2012-2014) but also highlights individual teacher's inability to manage more work owing to greater number of children that s/he had to look after. The teacher support would be affected as teacher would have increased responsibilities related to classroom behaviour issues together with their regular learning and teaching. Some teachers shared the workload issues owing to larger classes for some of their colleagues. The cases of 'bullying' highlighted by several people were attributed to lack of time for teacher to handle disciplinary issues which in turn was perceived to affect student achievement. It is also possible that teachers are not well trained in classroom management or in their subject and these needs to be looked into.

¹⁹ <http://www.spc.int/cc-project/>

²⁰ <http://www.pacificclimatechange.net/index.php/eresources/documents?task=showCategory&catid=228>

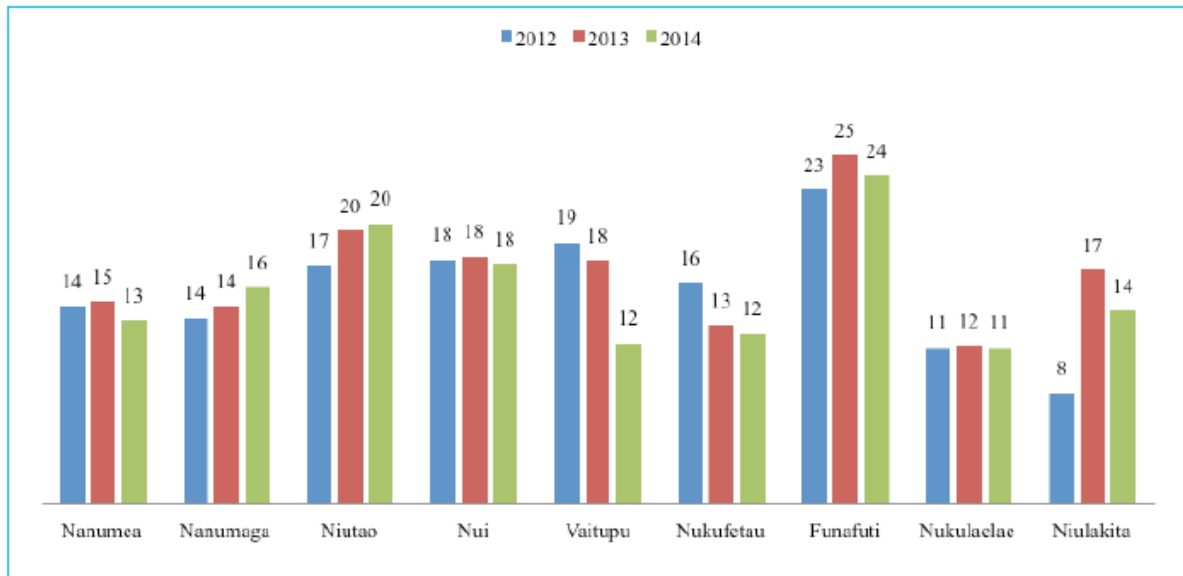


Figure 19: Teacher-Pupil Ratio in nine islands (Source: EdDep)

Table 1: NYEE Pass Rate (Source: TEMIS)

Year	No. sitting exam		No. passing exam		Total passing	% passing		Total sitting	Overall % passing
	Female	Male	Female	Male		Female	Male		
2012	119	131	95	79	174	79.8	60.3	250	69.6
2013	106	133	68	78	146	64.2	58.6	239	61
2014	117	118	83	65	148	70.9	55.1	235	63

A look at the transition rate from Primary to Secondary presents a different scenario (Figure 20 as derived from table 3.2 in annex 4).

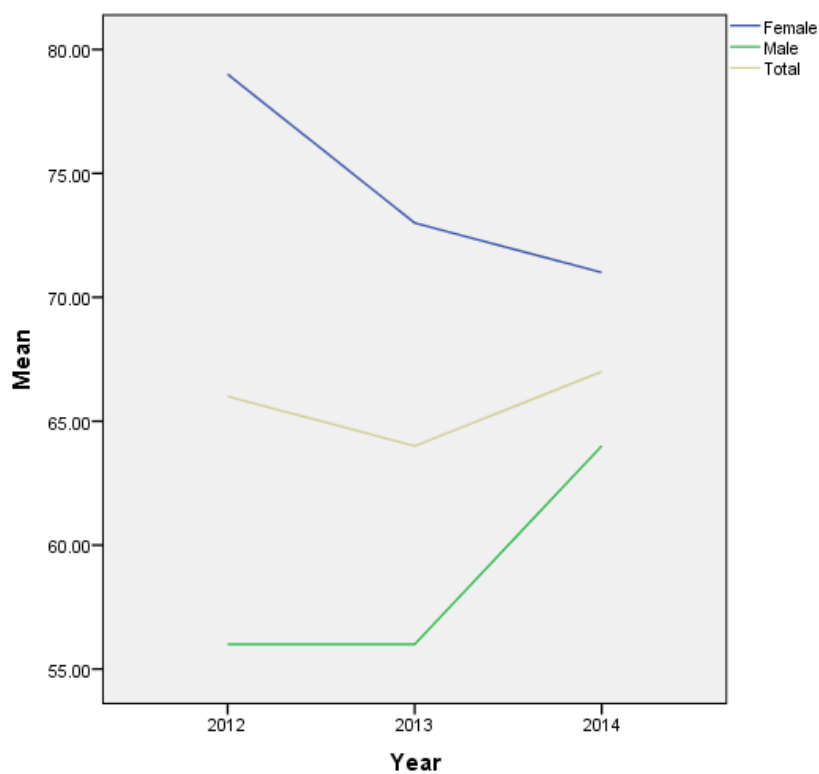


Figure 20: Effective Transition Rate from Primary to Secondary

There can be a number of explanations for this; however, there was nothing to explain the decreasing passing rate of male students in NYEE and their increasing effective transition rate over the three years period from primary to secondary. It would be worth following the pass rate for this group of male students (2013-2014) in secondary examinations (TJC and TSSC).

6.2 Teacher Education

Quality of education is an important issue and the need for quality teachers was highlighted at different meetings (modified focus group meeting teachers and MEYS officials, AEfATP programme members and general perception at various consultations). TEMIS data in Table 2 shows the dominance of female teachers over male at all levels (ECE, primary and secondary).

Table 2: Teacher Qualification (Source: TEMIS)

Qualification	ECCE			Primary (Years 1-8)			Secondary (Years 9-13)		
	M	F	T	M	F	T	M	F	T
Certificate in Education	0	39	39	1	8	9	0	0	0
Diploma in Education	0	5	5	9	56	65	1	6	7
Bachelors in Education	0	0	0	1	17	18	8	18	26
Master in Education	0	0	0	0	2	2	1	0	1
Doctorate of Philosophy in Education	0	0	0	0	0	0	1	0	1
No teaching qualification	0	15	15	0	0	0	6	24	30
Total	0	59	59	11	83	94	17	48	65

A majority of teachers in primary hold either a certificate or a diploma in education. The university environment enables graduates to learn a variety of other skills together with subject content; it must be noted that a majority of these teachers would come to USP or Fiji National University (FNU) in Fiji for their university education. Teachers in the focus group meeting shared their awareness on ICT integrated pedagogies and were able to highlight its importance especially if they had taken an ICT course at FNU or USP.

Female teachers were more vocal during the meeting and expressed their interest in training and upgrading their qualifications more than male counterparts. This is also reflected by the fact that the more female teachers have higher qualification (bachelors and masters) than their male counterparts. The MEYS officials and some teachers shared their perception that there is a lack of interest among teachers to come forward for TVET skills training and there was a vague understanding about “Open Educational Resources” (OERs) among the teachers.

There is a clear need for teacher training in a number of areas such as OERs, ICTs/elearning and TVET for some. Teachers’ inadequate content knowledge and teachers’ unhelpful attitude was raised as an issue by teachers themselves as well as MEYS staff. This issue of teachers content knowledge was also confirmed by team at the AEfATP (Achieving Education for All - Tuvalu Programme), however since AEfATP is towards its last leg, it is now working its exit strategy in close collaboration with MEYS. The emphasis is on training the master trainers in MEYS so that they can take over and assist the teachers with content knowledge and effort needs to made towards individual teacher development. Some of the areas highlighted by AEfATP are:

2. Teacher training on subject content and pedagogy
3. Regular professional development for teachers and leadership for teachers is very important together with locating experts in every department
4. Making videos of teachers teaching various subjects could help.
5. Networking with Teacher Education Institutions (TEI) – Need to relook at where teachers do their training was highlighted so that when they come back to Tuvalu they are able to handle their curriculum

6. Teacher attitude
7. Using appropriate technology
8. Gender mainstreaming at all levels of teaching

The example of MSS was given during meetings to compare the teachers' performance now with the late 1980s. It was felt that current students do not have effective communication skills compared to earlier (some interviewees went to the length of comparing it with their times). It was felt that teachers did not have enough training to assist their students effectively such that Tuvaluan children struggle when they go overseas to study. It was proposed to bring some native English teachers on board through ODFL. COL could address the issues raised as it has the tools and training packages.

TVET training for teachers was suggested by all stakeholders to enable delivery of quality skills training and which in turn will assist with quality students. However, teacher training will need to be carried out in different areas. Teachers who have had APTC training could become local champions/trainers if trained further. Approx. 20 teachers altogether were identified by MEYS for training in the area of TVET, OERs and ICTs (annex 3)



Figure 21: Focus Group Meeting with Teachers and MEYS officials (Photo: Shikha Raturi)

The need to strengthen TVSD skills was stressed to tackle the “drop-out” issue - to provide for the students who drop out of the academic stream.. The need to acknowledge different academic and practical abilities of students and the fact that some are talented in other skills was stressed. It was considered important that TVET trained teachers are empowered to promote TVET as a useful life skill. It was felt that some teachers look at TVET as inferior to academic subjects which in turn influences students' and parents' perception of TVET. Therefore, it is important that teachers take pride in TVET subjects and teach these with pride.

Previously CTC were situated in community in temporary infrastructure which needed refurbishment regularly and now efforts are being made to construct more permanent structures. Some teachers were of the opinion that children are shy to come to study TVET in the same premises as academic school. There is a need to raise general awareness on TVET and TVET teachers will need to be supported by the whole school staff and the island community as well as Kaupule.

On the other hand efforts are being made to arrange with the Department of Youth and Sports in MEYS (since they have training centers to cater for drop outs) to understand how they deal with the issue. The need to have concerted efforts in the establishment of training centers like CTCs with the help of overseas trained Tuvaluans is considered crucial.

The IT section is looking into providing servers to all islands and EdDep can help put TVET learning materials into those servers. This would offer opportunities for teachers to learn and provide flexibility of access to learn from resources in their own time. However, teacher training would be instrumental in ensuring teachers are able to learn and use such resources successfully.

6.3 Support System and Support Units

The **socio-economic background** of some students is such that they face a myriad of issues such as transportation especially during bad weather (heavy rains), non-attendance, lack of parent's presence at home to name a few. The issues were often inter-dependent. Such as non-attendance was sometimes because of lack of money for transportation to school during the bad weather (Tuvalu can experience heavy rains). Other times non-attendance could be due to a student's lack of progress or interest in a subject; it was noted that this could be attributed to teachers but more importantly parents. It was felt by teachers that in some cases parents are busy with their community engagements and not able to attend parent teacher meetings or provide enough time for children at home.

One of the main factor "**drop-outs**" influences on school students' studies. The teachers provided examples of cases where children enjoy being with "drop-outs" and school leavers and went on to discuss that the children in school often get a wrong impression during these companionships and consider it ('dropping-out" of school) as normal. The unemployed youth continue to live with their families and thus they have access to all amenities and family support - school children look at these youths and perceive them to be doing fine. On the contrary this impacts the students in way that it affects their studies.

There seems to be an issue of **bullying** in schools which was highlighted by a number of people during various meetings. The issue of "bullying" has been recognized by the MEYS and the government too but the necessary action to tackle the issue is yet to be seen. The "teacher-pupil" ratio was once again highlighted as an issue influencing rise of "bullies" and "drop-outs".

Level of motivation among students is also not considered strong enough. The teachers felt perhaps teaching is not effective enough and teaching is probably too abstract to retain students' interest. It was felt that students lack an active environment of learning and do not enjoy the passive learning environment that the school provides them.

Many Tuvaluans during various meeting expressed that **life style in Tuvalu** is easy and therefore children and parents perhaps do not see value in education and there seems to be a heavy dependence on families and extended families. Many teachers shared that such family systems lead to children not feeling the pressure or the need to actively mould their career and often lack ambitions to do something worthwhile in their lives.

Another participant commented, *"Sometimes what is happening in school is not what children are interested in and children find it hard to cope with. And TVSD skills can help these children"*.

Some commented that owing to a **lack of career counseling**, the learning environment is not very encouraging and neither do they have alternate facilities for the same. Therefore, a lack of career counseling unit was pointed out during a few more meetings and its impact on school children not having a clear sense of direction in their lives and professional career in future.

6.4 School Culture and Environment

The **school environment** and school culture in islands is moulded by the community and the teachers mainly. The schools in different islands work well depending on the strength of the school's

team and support and its understanding with Kaupule. This relationship between school, its team and Kaupule in turn influences the quality of education and students.

Anecdotally, children who succeed are the ones whose **parents** visit school frequently and find time to participate in school activities. Examples of parents who even go to the extent of cooking for the school were found to have their children take interest in studies and perform well. Generally, it was felt that there is a need for time to conduct workshops with parents for them to understand the value of education and the importance of attending parents-teachers meeting; a workshop with parents was considered a means to reinforce that parents understanding of their roles fully and make time for their children's activities in schools.

School facilities were seen to play a role but more importantly how it is used was what made all the difference. Teachers were considered key but support for teachers in terms of their professional development and academic qualification was emphasized.

Language is a barrier as **English is a second or third language** for children in some cases. For example in Nui, they speak in vernacular with English as a third language and it was seen that students drop-out if their English is not good.

Teachers' attitudes were considered to play an important role in creating a more conducive learning environment. Teachers' attitude towards their profession was considered more important than their academic and teaching qualifications. An example was given from one school where the relieving teachers who are less qualified seem to be better at their teaching than the permanent teachers. A participant commented, *"It is seen that sometimes well qualified teachers sometimes do not plan and deliver impromptu and thus do not do a good job as compared to unqualified relief teacher who plans the lesson well"*.

A conversation with teachers revealed that they consider that teachers perform better when they **work together as a team** - a point to be noted during their training and professional development activity. Teachers felt that they needed to upgrade the content knowledge by attending professional development exercises organized by MEYS. The capacity building training organized by MEYS was appreciated and it was considered to provide them an opportunity to engage in learning about learning and teaching techniques.

Teachers were thus considered as the strongest influence on the quality of education during various meetings. Therefore, teacher education came up again as an essential and key component for the quality of education.

The community plays a key role in shaping a school's culture and learning environment. Primary schools depend on Kaupule and their working relationship in turn influences the school operations and the learning environment. In Nanumaga, the Kaupule works closely with the school and sees TVET as a solution not only to their school "drop-outs" and unemployed youth but they also view it as a source of sustainable livelihood. Such attitudes enable schools in creating space for TVET learning and experimenting with new ideas and projects in the different areas including TVET. It was felt that general awareness in TVET amongst the communities could help change the image of TVET in the country.

6.5 School Infrastructure

The Department Of Public Utilities felt that infrastructure is fairly ok in relation to primary schools but there are issues with pre-schools and secondary schools not only in outer islands but also in Funafuti. A survey of ECEEE School carried out this year informed Public Utilities of the needs.

It was noted that a lot of current infrastructure is not conducive to children where some classroom have corroded roofing, leakage, some have no play grounds and some have no sanitation facilities in ECEEE schools in Funafuti. Anecdotal evidences suggest that the schools have to be closed during heavy rains since the windows do not work properly. All preschools are run by communities and government only supports basic materials and staff salary, therefore, maintenance is an issue. Though the government sometimes intervenes but by the time it is brought to the government's attention, it is generally too late.

There are a number of development partners such as NZAid and DFAT (previously called AusAID) and Canada Fund (Canada fund assisted Pre schools with water tanks) and an NGO (Loreto - a private Italian NGO which generally assists with papers etc). It was felt that the partnership is more holistic with pre-schools.

Earlier the government secondary school was under the care of Public Works Department (PWD) but since PWD has been dismantled, it is now under MEYS. A comment was made that helps understand the difficulty MEYS must face to manage the infrastructural issues for the secondary school; during PWD days, there were about 9-10 people staff and now education has only 3 people to take care of the same workload. There was a case of a dormitory catching fire owing to faulty wiring some 3 months back. The Department of Public utilities further shared that the latest maintenance was carried out in 2013 with the assistance from Japan to renovate the science laboratory, dormitory and classrooms; this was a result of assessment carried out in 2011.

The erratic electricity supply in the houses at Nauti Primary school was raised as an issue. The location of the school is such that it gets exposed to strong winds which in turn affect electricity supply to some of the facilities. Moreover the naked electrical wires pose OHS threat and use of conduit pipes to protect the naked wires is of utmost priority.

On the other hand, study time for student is limited due to control of electricity in the outer islands. The dormitory in MSS in Vaitupu turns off the light at around 9-10 pm, and students sit near ablution blocks to make use of the light to study (teachers quarters and ablution blocks have electricity till 12 p.m.) However, rationing of electricity in general has implications on students learning.

Overall, the infrastructure can also do well with regular maintenance plans; however, funding remains a critical issue.

6.6 Major Issues in Education and current TVET programmes

The English Language, learning and teaching techniques, teacher's content knowledge in academic subjects, student's interest/orientation towards the academic subject, passive learning environment all emerged as areas of concern that need to be addressed.

In addition to these, one fundamental issue raised was students being allowed to move on to the next class/grade without achieving the learning outcomes of the curriculum at that level. The students continue to move to next level till Form 1 (Year 7) without having to repeat even if they are academically weak; this hinders learning effectiveness. Form 2 (year 8) is the only place where students are made to repeat the class if they do not perform well academically. However, they can repeat only 3 times and after their third attempt if students do not pass, they have to leave the system (drop-out).

The students continue to struggle as they reach the next grade and by the time they drop-out, they are considered to have acquired little knowledge and skills such that when they opt for TVET courses, they still struggle. An example of this was given when students have done poorly in English and Maths and is therefore unable to cope with the content in TVET; it is an arduous task for these

children to process the content and comprehend. One participant commented, *“children coming to Year 8 cannot even read and this becomes a big challenge and it becomes impossible to do anything with them, as they need to have a medium [to communicate and express]”* This was seen to create problems when students opt for TVET and the TMTI programme.

The TVET syllabus was considered tough for these “drop-out” students as English, Math and Business syllabi seem a mismatch with the drop-out childrens’ abilities.

Some considered having TVET streams run parallel would help academically weak children from the beginning but the attitude and perception of TVET as a second class stream amongst the parents might not welcome this idea. The parents do not even like their children doing TVET even when their children have failed and prefer if only they could continue with academic subjects.

The schools that have proper facilities within the school (as opposed to others where physical space itself posed a problem) and TVET trained teacher generally seemed to do better in TVET - the term “better” referred to successful completion of a skills programme by children who enrolled. There is no employment record either in the government or schools (in the form of alumni records) that this claim could be tested/verified. However, there is anecdotal evidence of skilled youths taking some opportunities to be gainfully employed. One comment explains the kind of job opportunities they currently have, *“Students (who drop out) do not have a proper pathway so all we have is just ad hoc school based TVSD training - they are only absorbed by the traditional markets and looking after themselves making petty cash”*

Due to the lack of resources and teacher unavailability in particular skills, students do not get the skills they would like to learn and instead are forced to learn what is available which in turn affects their performance. Therefore, availability of a variety of TVET courses for students to choose from would serve these students well.

The majority of teachers agreed that TVET is a good program but it needs

1. Accreditation - this will allow children to move to another place for further study in TVET area.
2. A proper pathway - this will allow children to progress in the direction of TVET as currently there is nothing in Tuvalu once they complete TVET courses run by schools in primary and secondary. Currently, there is a lack of progression in technical and vocational careers.

TMTI seems to have served the country well in terms of employability so far but of-late TMTI graduates have been noted to struggle for employment. Thus people in general are now concerned of the availability of opportunities for seafarers. The prospect of TMTI looking at other technical and vocational qualifications (short courses in the areas of welding etc) and the opportunity for TMTI graduates to work on the fishing boat is being welcomed by Tuvaluans. Further pathways to move on to cadet training in Tuvalu (rather than going overseas) as discussed earlier is an idea that is brewing and could eventuate with support from government and development partners.

It was suggested that perhaps primary schools need to focus on preparing the students that dropout for TMTI and prepare them for that and then they can complete TMTI courses smoothly in the set duration; it was noted that students take much longer than the set duration for completing the TMTI course.

Similarly, MKH has been noted to serve the country well in terms of providing human resources in the area of secretarial and book-keeping. MKH trained youth are able to study further through USP Pacific TAFE.

Regardless of the island size and needs, entrepreneurial skills are considered highly important by majority of Tuvaluans consulted during this mission. The main reason was that entrepreneurial skills are useful since not everybody can be employed.

As discussed earlier, the APTC programme while considered good only provided opportunities to the people already in a job. The courses run by FNU were considered too difficult and theoretical and lacked enough practice. It was noted that since the offering of TVET by FNU in Tuvalu in 2011, the country is yet to see graduates from this programme. However, USP Pacific-TAFE courses were considered useful and currently MEYS is negotiating with them for more courses.

7.0 Cross-cutting Issues

7.1 Gender Issues

7.1.1 Learning outcomes at TJC

There is a trend of females outperforming males in the field of education and the higher qualification of female teachers as compared to their male counterpart can be the first example here. The situation in the school also remains the same whereby girls are seen to outperform boys. The Year 10 exam (TJC) was introduced in 2011. Except for a slight drop for female students in 2012, their pass rates have increased tremendously with a high performance (78.6% pass rate) in 2014 as opposed to a very low performance by male students (17.6% pass rate) in the same year (Figure 22). This was expressed as a worrying issue by some education officials and the need to promote male students in the field of education was emphasized.

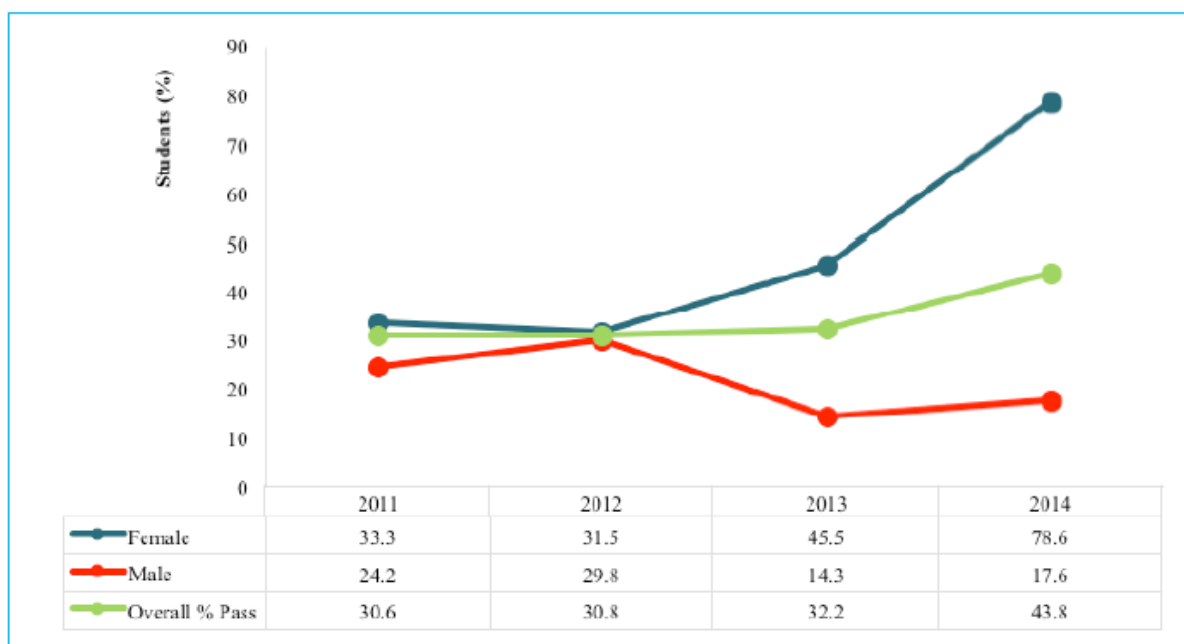


Figure 22: TJC pass rate for male and female student and the overall percentage pass (Source: DepEd)

7.1.2 Gender issues at TMTI

The opening up of entry to female candidates is a step forward in terms of gender mainstreaming. However, the failure of other two female candidates is being attributed to the intimidating social environment owing to very few female amongst a large number of male students. The female students find it difficult to cope with studies in such an environment. As a result the parents are now reluctant to send their daughters to TMTI. Therefore, there is now a push to increase the number of

female students in the cohort so that they can provide each other the necessary psychological and emotional support.

The success story of Tuvalu and TMTI's first ever female graduate is an inspiration to young women. This female graduate has participated in a talk back show on radio trying to encourage girls to join TMTI. During the conversation too, she was quite vocal about the need for women to enter into male dominated areas. She wants to study engine studies (advanced engineering, yet another male dominated area) further and is highly ambitious. However, currently she has no job and is waiting for the opportunity to work as the seafarer.

7.1.3 Gender balance in the teaching professions

There is a complete absence of male teachers in ECEEE and much fewer numbers in primary as compared to secondary school teaching. The male Tuvaluans are of the opinion that perhaps a lack of male teachers as a role model during the early years in school influences male students' performance in school and also the "drop-out" rates. The conversations affirmed how TVET skills training too are gender-specific despite TMTI opening its doors for female students such as cooking and sewing (to name a few) was considered skills suited for females and mechanics and carpentry (again to name a few) suited to males.

It was unanimously agreed that the gender awareness needs to be created right across all the sectors including "respect for women". One such awareness campaign was being carried out during the visit. A distinguished Tuvaluan (man) addressed a gathering to raise awareness and demonstrate his support during NZAid awareness campaign "Stop Violence against Women" (Figure 23).



Figure 23: Awareness session by NZAid on "Stop Violence Towards Women" (Photo: Shikha Raturi)

7.2 Sustainability Issues

Limited economy, tiny population and scattered geography pose a major challenge for Tuvalu. The issue of accessibility of academic and TVET courses was highlighted, especially when students need to physically move from one island to another due to lack of skills training opportunities on their island. It was suggested that availability of OFL facilities would enable access to TVET learning. This was discussed in the light of COL's possible activities and also government's vision of "Education For Life".

It was also pointed out that while the projects work well and are successful during the implementation stage or only a few years post implementation period, some projects have been seen to either stop completely or struggle. The examples discussed were:

1. Taiwan ICDF Aquaculture project

2. Biogas project in communities

The difference in approach in a project can attribute to its failure was picked by the EU PacTVET project and thus its decision to opt for family based approach over community based approach. Therefore, sustainability of the project needs to be considered bearing in mind community support, limited resources and economy prior to implementing a project in Tuvalu.

7.3 Tuvalu Skills Training Needs

This section brings together the skills needs as highlighted from different groups of people and departments.

A session with a select few students from Nauti Primary School and Fetuvalu Secondary School provided following skills as areas of needs:

- Canoe making, boat making, fishing skills, netting
- Weaving mats - skills to learn handicraft for our handicraft centre
- Toddy cutting -
- Mechanic - fix motor bikes, cars etc.

A session with the MKH school students provided following skills as areas of needs:

- Sewing and designing clothes such that they can do business
- Girls expressed interest in learning basic mechanical engineering (at the moment they have to go to Fiji to learn that)
- Cooking - baking (2 bakeries in Tuvalu but don't teach how to bake - they went to Fiji for training)
- Horticulture – agriculture
- Receptionist

The majority of Tuvaluans consulted recommend training in the area of:

- Business entrepreneurial skills
- Hospitality (to enhance tourism)

Nanumaga Kaupule has requested MEYS to assist with following skills based training:

1. Weaving mats
2. Scoop making (fishing net)
3. Local string making
4. Others:
 - a. English
 - b. Carpentry
 - c. Working with Cement - making footpath for the school - children will learn mixing cement and make 2 foot wide path for ferry-way and school-way. It is noted that COL already has OER materials produced in the Pacific on this subject.

The Public Utilities Department emphasised basic TVET skills as well as rigorous skills training in the area of metal work and technology in TVET (for metal work and mechanical engineering) at secondary level in Tuvalu. This would enable the youth to confidently move for training in post-secondary institutions. Also a lack of available internship options is seen as a detriment to progress TVET area in beyond school level TVET. Some secondary students who are interested in this work could volunteer with Public Utilities Department and then get a scholarship for further studies; internship is viewed essential as it helps them too.

The Labour Department highlighted the importance of providing youth skills so that which they can work overseas and come back but also migrate if they want to. Every year, 75 Tuvaluans can migrate to Australia but the Labour Department is skeptical about necessary skills amongst its youth and looking at various TVET providers to assist Tuvalu in this area. Some of the skills highlighted by the

Labour Department are similar to what has been raised by others such as, hospitality, horticulture, carpentry and electrician, mechanics, plumbing, customer service training, receptionist, sewing (tailoring) and entrepreneurship. Other skills highlighted below were considered important from the view point that these skills would enable youth to get a work visa for New Zealand and Australia and earn decent money:

- Viticulture
- Aquaculture
- Age-care

The worst case scenario of climate change was accepted as a reality of the distant future (50-100 years) and skills development of Tuvaluan youth seen as a means to ensure Tuvaluans are able to find jobs when they migrate. However, no statistics could be obtained from the Department Of Labour. There is also no current accepted Labour Market Study in Tuvalu.

The Department Of Fisheries indicated a shortage of skilled people for its three sections:

1. Oceanic fisheries which looks after tuna
2. Coastal fisheries which takes care of coastal resources
3. Operation and development section looks at training and working with fishermen.

The two area, Purse seine (licensing of fishing vessels -) and non-liner require skilled Tuvaluans. One of the main revenues for Tuvalu is from fishing license. Now there is a need for skilled people in the vessels for purse seine and non-liners and thus the Fisheries Department provides people extra training to fit in these professions.

TMTI has thus diversified to cater for this training and the fisheries department provides resources and funding for this training; NZAid assists in this area. Previously, a NZ Consultant was hired by NZAid to conduct TOT (3 week long training) and now TMTI makes use of material from the NZAid training to train the seamen.

It was a general feeling that Tuvalu has several graduates in fisheries, there is always a need for new areas such as *marine affairs, marine management, marine biology*.

However there is a need in the area of mechanical workshops to assist fishermen when they are out at sea and the boat breaks down. It was felt that this is one area Tuvalu lacks skilled Tuvaluans especially considering that there are new boats and there is no training in for fixing aluminum boats. The issue of combining mechanical training with entrepreneurship was raised again.

7.4 The Gaps

There is a lot being done in different areas of education by different entities and development partners, however a number of gaps became apparent during this consultation visit.

1. **Career Counseling Unit:** Despite community and MEYS support, there is so much a school can do for each student. There is a lack of any form of career counseling unit in schools or community based. In the absence of career counseling, students tend to either pick courses that is norm or what is acceptable to the society.
2. **Relevancy of courses/programmes being offered:** There is no doubt that a number of different skills and TVET courses are being offered at various levels but the nature of some of these courses was queried. An example of a course from FNU was given to emphasize that for a skills based program, focusing on theory more than practical does not provide the necessary skills

3. **Lack of ICT integration in education:** This can be a contentious point if we were to generalize it, however, examples given during this consultation can throw some light on this issue. An example was given for lack of ICT skills and knowledge puts students in an challenging position when they go to USP to do a course (USP uses university wide LMS (Moodle) in all its courses including courses in Foundation and Pacific TAFE.
4. **Lack of ICT devices:** A lot of projects being implemented use ICT devices and also internet. Even though there are plans for learning facilities and internet via KBS by 2017, the country faces a serious shortage of ICT devices amongst children and youth and internet access too. This is a huge problem as trainings must be done together with ensuring access to a computing device.
5. **Database for labour/job market:** There was no record of the needs of the job market or areas where there is an abundance of human resources. A database of this information would be useful in the country's planning and finalizing the draft TKIII. Also the fact that while some suggested the need for "carpentry skills", others indicated the market is overflowing with carpenters such that some are unemployed. In this scenario of unemployment, entrepreneurial skills training would be useful.
6. **Inadequate opportunities for internship:** The skills training, courses and programs offered by different units are useful but a lack of internship opportunities makes it difficult for youth to become meaningfully productive in the work force.
7. **Skills Qualifications Pathway:** Ad hoc skills training in primary is good, however, its continuation to secondary level would motivate children to work well at the lower level as higher awards would act as an incentive. One person commented that most of Tuvaluan tradesmen have the skills but no qualification. Recognition of prior learning might also assist to qualify adults with existing skills and add value to technical skills in the community.
8. **Accredited certificates:** A point that resonated during various meetings was a need for proper training and pathways for accredited certificates and awards for TVET programmes. This often leads to lack of desire to study further in the area
9. **Lack of policies:** Policies are instrumental in guiding programmes and projects. Necessary policies and frameworks will be useful to ensure that these programmes and projects are being guided and have the necessary support from the relevant departments and bodies.

7.5 Policies and Frameworks

All major ministries dealing with different sections indicated a need for technical assistance in the area of policy writing. A lot of documents exist in draft form such as the National ICT policy. The country has cyber crime legislation and National ICT draft policy has been developed with assistance from ITU and EU. As a result, a TA was funded to develop the National ICT policy in 2013 and the stakeholder consultation took place towards the end of 2014 and it is pending Cabinet approval.

The ICT Department is in the process of developing e-government policy and relevant regulations. MEYS is now focusing on ICT in Education policy and looking to development partners for technical assistance. There is no policy in the area of TVET and elearning/ICT in education. TKII is used as a reference guide for education and ICT in education. MEYS informed that there is some interest and initial talk on its development but would need assistance and training.

8.0 Conclusions and Recommendations

Limited economy, tiny population and scattered geography pose a trilemma for Tuvalu. This results in a shortage of skilled human resources, a lack of financial resources and delays in accessing the islands as highlighted in EFA review (2015). There are solutions proposed too for instance, thirty five key solutions were identified and prioritized based in existing strategy and plans in MDG MAF report (2013). This report has highlighted challenges and the current status of education. Bakalevu (2011) highlights the general attitude towards TVET:

“The communities need to be convinced of the importance of TVET as a provider of life skills for employment and citizenship, initiative and self-sufficiency, and self employment. There is a need for a fundamental re-thinking of the role and place of secondary education and that TVET must be a vital part of that reform.” (p. 16)

8.1 Key Findings

TKII-MTR (2011) together with MAF (2013) and EFA Review (2015) highlight many issues requiring attention in order to fulfill Tuvalu’s commitment to EFA, MDGs and their own strategic plan Te Kakeega II NSSD (2005-2015). This section will focus on FIVE key findings as a result of desktop study and various consultations and modified focus group meetings.

8.1.1 Quality of Education

1. High teacher-pupil ratio and student achievement were perceived to be related. This in turn has a ripple effect on several other issues such as “drop-out” rates, “bullying issues”, “unemployed youth”, “poverty” , “general attitude” etc.
2. School dropout/low pass rate at NYEE, TJSC and PSSC and out-of-school youth in the country are of concern and therefore there is a need to “re-think” the education options such as TVET skills training and pathways. Currently, there is a lack of pathway in TVET and a “good enough” career, therefore it has a poor image.
3. The importance of TVET skills, awareness, offering formal and informal training in a systematic manner, administration of TVET provider in the country were reiterated in a number of meetings. A proper pathway in TVET and its accreditation was deemed crucial.
4. Teachers’ qualifications and teacher attitude both need to be addressed. Efforts need to be made to upgrade teacher qualification, offer continuous professional development in different areas to keep the teachers motivated and abreast with the regional and global trends in education. Teacher content knowledge was highlighted as an issue. 20 teachers were identified by MEYS for training in the area of TVET, OERs and ICT in education / elearning.
5. Infrastructure in terms of energy supply for schools, telecommunication facilities and buildings require attention. Though Tuvalu is one of the very few countries with an ambitious energy target (100% RE by 2020), the situation in schools still remain an issue with its electricity rationing scheme in the outer islands. There is a plan for internet coverage for the whole country with the help of KBS by 2017, however, the current situation is difficult. There is non-existent internet in outer island and Funafuti with its latest 3G coverage still offers an expensive internet deal. The buildings and other resources for schools can do better, however community support in each island is generally responsible for primary school and it demands a good understanding between the school and Kaupule.

8.1.2 Policies

A number of policies exist in the draft form such as ICT policy. However, a thorough consultation has been carried out for NSSD such that TKII has now been revised close to its life period (2005-2015) and the TKIII is beginning to take shape. Technical assistance is generally required in the area of policy development owing to Tuvalu's limited human resources. In general, there is a will for the development of policies in a number of areas. The areas highlighted for technical assistance are OER, TVET and elearning/ ICT in education policy development

8.1.3 Gender mainstreaming

The issue of gender mainstreaming needs awareness. While in some areas women are doing very well such as education, there are other areas where the presence of women is negligible as in Kaupule. There are a number of NGOs both nationally and internationally that generate awareness on gender mainstreaming but Tuvalu has a long way to go.

8.1.4 Sustainability Issues

Limited economy, tiny population and scattered geography offer Tuvalu a trilemma. Tuvalu also faces a major threat from climate change. Sustainable development for Tuvalu is an extremely difficult task. Efforts must be made to assist in projects such as equipping Tuvalu with OERs would help. There are a number of regional projects that have produced educational resources training packages; converting some of these resources relevant to Tuvalu into OERs would enable educational access to Tuvaluans at no cost.

8.1.5 Community Support

Tuvaluan social fabric is bonded with the strong ties from the culture and with the culture comes the support from the community. Community support is particularly visible in the case of primary schools and CTCs. It is extremely important that whenever there is a project or activity, the community is consulted first.

8.2 Recommendations

The recommendations made in this section are in accordance with Tuvalu's **National Sustainable Development Framework (TKII)**. There are five main areas where COL should be able to assist Tuvalu by collaborating closely with Ministry of Education, Youth and Sports' two departments, (i) Education Department and (ii) Department of Youth and Sports:

1. It would be important to demonstrate a **TVET based pilot project** in Tuvalu. It will help tackle unemployment and sustainable livelihoods. However, it would be extremely important to provide training and build capacity. The infrastructure is such that solutions will need to make use of appropriate technologies in the delivery of these trainings. The training materials will need to be contextualised to suit the Tuvalu context. A TOT model for training will help Tuvalu multiply its capacity independently.
2. There is a general acceptance for **Open and Flexible Learning**, however, for the sustainability and success of it, appropriate technology and training will be crucial.
3. With the inclusion of Year 9 and 10 to primary schools, there is now even a bigger need for **ICT in education/elearning training for teachers**. For example, training on use of multi-media can assist primary teachers to get expert help from secondary schools.

4. **Open Educational Resources:** There is lack of educational material and that too contextualised educational resources. Training on OERs would assist teachers and Education officials.
5. **Policy development :** Technical assistance in the area of ICT in Education/elearning policy and the TVET policy development would be useful for Tuvalu and support for the activity would be welcomed by the Director of Education.
6. **Gender mainstreaming :** There is a clear need for assistance in gender mainstreaming ; COL could address these issues as it has the tools and capacity building resources.

8.3 The Way Forward

In addition to the six recommendations, Nanumaga is recommended as a plausible pilot project site which could be an activity that COL could begin with.

Nanumaga as a Plausible TVET pilot project site

The island of Nanumaga appears to be an appropriate place for a TVET pilot project as it has support from the Kaupule and the primary school on the island. A retired school supervisor has been instrumental in working with the community in skills based training for the youth and adults on the island and has been appointed as Kaupule member since 2015. It was felt that the attitude towards TVET is generally positive but consultations with all stakeholders are generally useful for any activity and so it is in the case of TVET too. A holistic approach is being implemented to engage unemployed youth, drop-outs and adults in much needed skills based training with the vision to create sustainable livelihoods for the people of Nanumaga.

The Tokolua Pule is engaged in two skills based entrepreneurial activities:

1. Small fishing business whereby the relatives go fishing followed by salting of the fish carried out by couples and then transportation of the fish to the main island Funafuti.
2. Virgin Oil from coconut - 20 litres of coconut oil is produced per week

The Nanumaga Kaupule has been pro-active with their efforts and it is evident by their request to MEYS for a number of skills based training. The Local skills request to MEYS is as follows:

1. Weaving mats
2. Scoop making (fishing net)
3. Local string making
4. English
5. Carpentry
6. Working with Cement

Nanumaga Primary School has approximately 110 students (103 for the year 2015 but 115 in 2012) and 9 teachers (from 2015 onwards) per calendar year. Usually they have cookery and carpentry classes but this year they could not have any because of the wrong assumption of lack of funding; this was highlighted as a classic example of importance of support from Kaupule. Owing to a lack of communication between various parties involved, in this case Kaupule and the school, the school missed out on funding which was regretted by all later on. Thus they are now more focused on enhancing communication and support from various stakeholders.

However, it now appears that there is a good working relationship between the Nanumaga Kaupule and the primary school. The primary school has given an office space to Tokolua Pule until the Kaupule building is ready. The Kaupule Office is being refurbished to a double storied building from a single storied building.

The primary school has one laptop and one desktop provided by the MEYS. The Kaupule is working closely with MEYS and aware of their elearning project which will bring in computers with a server. The school is working with Kaupule to prepare the physical space and furniture for the computer room in the meantime.

Generally, the Nanumaga people would like to learn about carpentry and basic engineering. Considering awareness generated for local produce, farming in the area of chicken farming, piggery, cabbage, cucumbers and leafy vegetables has emerged as a critical area for training.

Looking back, the Nanumaga Tokelau Pule shared that CTC probably did not work in the past due to

1. teachers' commitment and
2. parents' attitude and in some cases their indifferent behaviour

Regular awareness sessions with the communities are considered important and more so in case of all the islands in Tuvalu. Such awareness sessions will need to become a regular part of Nanumaga community with use of ICTs in the community hall. The use of ICTs with parents for informal session is useful to gain their trust and confidence. The respondent also added that there was an overemphasis on theory and lack of enough practical experimental time and this is not the way Tuvaluans enjoy learning. Children like theory with practice but it should be 25% theory and 75% practice ensuring they "learn by doing". It was also felt that Learning by imitation works with PIC children so if Tuvaluan children watch a person or a video demonstrating a skill, they could then copy it and practice until they master the skill.

In Nanumaga CTC, they have classroom available unlike many other islands where they use community halls in the absence of physical space within the primary school for the CTC. Nanumaga CTC carries out 4 weeks training and run 2-3 skills during this period; they generally manage 6 such trainings per year.

Nanumaga (together with Nanumaea) will have free internet from early 2016 as a part of ITU project for Tuvalu and they will, therefore, be able to use computer and internet for learning and teaching soon. The computers for ITU project for Nanumaga have already arrived in Funafuti and waiting arrival of satellite dish before internet work can commence. In addition to ITU's project, Nanumaga is also covered for internet coverage under the country-wide plan for its enhanced telecommunication services through KBS.

Nanumaga Kaupule felt that COL could assist with learning materials, something like Khan Academy would be appreciated (they said). They would prefer animated program such that children who cannot read texts could also make use of such resources. Videos are also considered useful as a learning resource. They plan to use overhead projector to show children videos and their field for practical work. They were also keen to make their own videos provided they have the equipment and expertise to do it.

Overall, Nanumaga appears to be ready for a TVSD pilot project and showcase it to the rest of Tuvalu as an exemplary model considering its just enough exposure to TVSD and Kaupule's support and presence of sufficient teachers on the ground and its quota of educational electronic devices in Funafuti.

The vulnerability of Funafuti to its limited economy and resources is evident as one walks through one end of the island to the other (Figure 24). Any effort to sustain livelihoods in Tuvalu will be appreciated by this tiny island nation and its people.



Figure 24: At the tail-end of the island of Funafuti (Photo: Alapati Taupo)

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Annex 1: Individuals/Organisations Consultation during the Mission (15th Oct. - 15th Dec. 2015)

Consultation in Funafuti, Tuvalu

Mr. Kapuaua Ioelu **ELI**: Assessment and Examination, Ministry of Education, Youth and Sports, Tuvalu
email: eliioelu@gmail.com

Mr. Lapanua **ENE**, Tokolua Pule for Education, Nanumaga
Email: lapanahohene622@gmail.com

Mr. Halo Tuavai & Mrs. Marretta Kabane **HALO**, Owners, Marretta Kabane Halo (MKH) School
A group of current students (all female except one) from MKH School

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Mr. Avafoa **IRATA**, P.S., Ministry of Public Utilities and Infrastructure, Tuvalu
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Ms. Foma **KALALA**, TMTI Graduate (First Female Graduate from TMTI, 2014)

Mr. Chao-Chiung **LAO**, Acting Leader, Taiwan ICDF
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Mr. Neaki **LETIA**, Curriculum Officer, Ministry of Education, Youth and Sports, Tuvalu
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Mr. Simeti **LOPATI**, CEO, Tuvalu Telecommunication Corporation
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Mr. Mafalu **LOTOLUA**, Director, Tuvalu Electricity Corporation
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Honorable Minister Fauoa **MAANI**, Ministry of Education, Youth and Sports, Tuvalu
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Ms. Fulitua **SIAOSI**; Deputy Director, Department of Fisheries.
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Mr. Morgan **SIMMONS**, English Consultant, AEFATP (Achieving Education for All - Tuvalu Programme), Ministry of Education, Youth and Sports, Tuvalu
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Honorable Prime Minister Enele **SOPAGA**, The PM's Office in Tuvalu
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Mr. Uatea **VAVE**, Acting Director, Agriculture Department, Ministry of Natural Resources, Tuvalu
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Group Meetings with

1. A group of current students from Fetuvalu Secondary School and Nauti Primary School
2. A group of current students from MKH school
3. A group of teachers from different schools and MEYS officials

Consultation in Suva, Fiji

Dr. Sarah **HEMSTOCK**, EU PacTVET coordinator

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Annex 2: Guiding Questions (During document analysis, consultations and group meetings)

Teachers, administrators, EdDep, Community members, Kaupule members

Owing to the Gender mainstreaming strategy for gender disparity, questions will target both male and female educational achievements and their ambitions in life for their sustainable livelihood.

I. Quality of Education

1. Basic statistics for student progress. What are the enrolment and transition rates?

- a. What is pupil-teacher ratio in each school
- b. What are the gaps and constraints in the provision of schooling?

2. School dropout/low pass rate at NYEE, TJSC and PSSC and out-of-school youth in the country

- a. What age groups make up the largest numbers of out-of-school youth?
- b. What is the gender distribution of out-of-school youth and school dropout?
- c. Which level(s) of schooling records the highest numbers of school dropout?
- d. What is the current pass rate in each of the school? Which islands are more susceptible to student failure/drop-out?
- e. What do you think are the major factors contribute to school dropout and or low pass rate?

3. High numbers of unemployed youth - Scope TVET skills offering, training and administration of TVET provider in the country

- a. What is the unemployment rate? and amongst youth
- b. What do you see are the challenges/weaknesses and strengths in the current TVSD/TVET programmes offered at
 - i. year 8
 - ii. year 12
 - iii. formal level
- c. What TVET education services are available? Who are the providers? Are these effective? what is working and what is not?
- d. How accessible is the TVET training to those who need it, is it adequately accessible, please explain why or why not? what improvement would you like to see?
- e. How well is the TVET training services utilized? Are there differences in utilization of TVET training?
- f. What are the barriers to access and utilization of TVET?
- g. What is the success rate in the utilization of these TVET training?
- h. What employment and further education opportunities are available at the end?

4. Teacher education - Train the trainers

- a. How many teachers have teaching qualification?
- b. How many teachers are trained to teach TVET?
- c. How many teachers would need training in the area of TVET, OERs and use of ICT

II. Policies

1. TVET policy

- a. What existing policies cover TVET or is there a draft form?
- b. How effective and practical is this policy?
- c. What partnerships exist for the provision of services?

2. ICT policy

- a. What existing policies cover TVET or is there a draft form?
- b. How effective and practical is this policy?
- c. What partnerships exist for the enabling use of ICTs?

III. Gender mainstreaming

- a. How aware are people as well as community with respect to gender mainstreaming?
- b. What efforts are being made for gender mainstreaming, in terms of
 - i. awareness and
 - ii. policy?

IV. Sustainability Issues

- a. How sustainable is the level of national support for the TVET training, use of ICT in schools, educational resources?
- b. What sources and level of funding are available to fund TVET, use of ICT and educational Resources?
- c. What provisions are there for capacity building – training of trainers?

V. Community Support

- a. How do the communities view school dropouts?
- b. How do the communities view TVET skills learning, ICT training, OERs?
- c. What community involvement in school education /TVET exists?
- d. What is the capacity of communities to support TVET service?

Some additional questions

- 1. What do you think of having a centralised system in place to cater for school drop outs after year and 12?
- 2. What has been the contribution of development partners in the recent initiatives?
- 3. What are the areas that development partners and COL could focus on?
- 5. What do you think about?
 - a. TVET for female in male dominated areas, such as entry to maritime?
 - b. Higher educational qualifications by women as compared to men?
 - c. TVET in sec schools since 2009
 - d. TVET in pri schools since 2010

Electricity Provider

- 1. Current status of electricity (diesel/solar) in the nine islands and its schools and affordability
- 2. Future plans for electricity

Telikom and Internet provider

- 1. Current status (phone/internet) in the nine islands and its schools and affordability
- 2. Future plans for telecommunications and internet

Annex 3: List of Teachers Recommended for Training

Annex 4: Relevant Tables Used in the Report (Source: Tuvalu Education Management Information System (TEMIS))

Table 3.1: ENROLMENT RATES:

ECCE NER & GER

<i>Indicator</i>	<i>2012</i>			<i>2013</i>			<i>2014</i>			<i>2015</i>		
	<i>M</i>	<i>F</i>	<i>T</i>	<i>M</i>	<i>F</i>	<i>T</i>	<i>M</i>	<i>F</i>	<i>T</i>	<i>M</i>	<i>F</i>	<i>T</i>
<i>NER</i>	72	72	72	64	70	67	67	72	70	71	67	69
<i>GER</i>	100	104	101	90	99	94	95	97	97	92	92	92

PRIMARY NER & GER

Level & Year	GER			NER		
Primary	Male	Female	Total	Male	Female	Total
2012	103	107	105	93	88	90
2013	110	112	111	98	94	96
2014	102	106	104	91	88	89
2015	102	106	104	91	87	89
Secondary	Male	Female	Total	Male	Female	Total
2012	59	90	74	71	46	58
2013	61	92	75	72	46	58
2014	66	85	75	66	49	57
2015	67	87	73	67	52	59

Table 3.2: TRANSITION RATES:**Transition Rate from Pre Primary to Primary**

Year	Repeater in Year 1			No. Year 1 new entrant			No. student final year of the preceding cycle			Transition Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2012	0	0	0	139	120	259	113	114	227	123	105	114
2013	0	0	0	148	116	264	143	111	254	103	105	104
2014	0	0	0	126	125	251	126	122	248	100	102	101
2015	0	0	0	132	130	262	133	135	268	99	96	98

Transition Rate from Primary to Junior Secondary by gender.

Year	Repeater in the preceding year of Year 9			No. Year 9 new entrant			No. final year of preceding year			Transition Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2012	0	0	0	89	96	185	160	121	281	56	79	66
2013	0	0	0	93	93	186	165	127	292	56	73	64
2014	0	0	0	100	87	187	156	123	279	64	71	67
2015	0	0	0	72	94	166	146	130	276	49	72	60

Transition Rate from year10 (Lower) to Year 11 (Senior) Secondary by gender.

Year	Repeater in the preceding year of Year 11			No. Year 11 new entrant			No. student in final year of preceding year			Transition Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2012	0	0	0	49	79	128	58	103	161	84	77	80
2013	0	0	0	49	89	138	88	101	189	56	88	73
2014	0	0	0	57	81	138	74	92	166	77	88	83
2015	0	0	0	76	83	159	102	108	210	75	77	76

Table 3.3: TEACHER PUPIL RATIO:
ECCE & PRIMARY

Year	Island	ECCE			Primary		
		Enrolment	Teacher	TPR	Enrolment	Teacher	TPR
2012	Nanumea	44	5	9	115	8	14
	Nanumaga	36	4	9	108	8	14
	Niutao	51	4	13	139	8	17
	Nui	42	4	11	142	8	18
	Vaitupu	65	7	9	228	13	18
	Nukufetau	43	3	14	129	8	16
	Funafuti	417	28	15	936	34	28
	Nukulaelae	32	2	16	68	6	11
	Niulakita	4	1	4	8	1	8
	Tuvalu	734	58	13	1873	94	20
2013	Nanumea	47	5	9	118	8	15
	Nanumaga	32	4	8	115	8	14
	Niutao	46	4	12	159	8	20
	Nui	22	4	6	144	8	18
	Vaitupu	85	7	12	212	13	16
	Nukufetau	33	3	11	104	8	13
	Funafuti	410	28	15	1042	32	33
	Nukulaelae	22	2	11	69	6	12
	Niulakita	5	1	5	17	1	17
	Tuvalu	702	58	12	1980	92	22
2014	Nanumea	51	5	10	107	8	13
	Nanumaga	42	4	11	126	8	16
	Niutao	46	4	12	163	8	20
	Nui	46	4	12	140	8	18
	Vaitupu	88	7	13	175	13	13
	Nukufetau	37	3	12	99	8	12
	Funafuti	402	29	14	980	34	29
	Nukulaelae	27	2	14	68	6	11
	Niulakita	9	1	9	14	1	14
	Tuvalu	748	59	13	1872	94	20
2015	Nanumea	43	6	7	87	9	10
	Nanumaga	39	4	10	103	9	11
	Niutao	46	4	12	118	13	9
	Nui	43	5	9	132	8	17
	Vaitupu	101	10	10	181	12	15
	Nukufetau	42	3	14	119	10	12
	Funafuti	361	29	12	916	37	25
	Nukulaelae	24	2	12	85	8	11
	Niulakita	3	1	3	12	3	4
	Tuvalu	702	64	11	1753	109	16

Table 3.4: PASS RATE:**NYEE PASS RATE**

Year	No. sitting exam		No. passing exam		Total passing	% passing		Total sitting	Overall % passing
	Female	Male	Female	Male		Female	Male		
2003	80	119	36	43	79	45.0	36.1	199	39.7
2004	130	152	36	43	79	27.7	28.3	282	28.0
2005	145	168	57	58	115	39.3	34.5	313	36.7
2006	138	188	39	34	73	28.3	18.1	326	22.4
2007	145	182	71	60	131	49.0	33.0	327	40.1
2008	145	147	88	39	127	60.7	26.5	292	43.5
2009	144	138	81	56	137	56.3	40.6	282	48.6
2010	128	152	74	52	126	57.8	34.2	280	45.0
2011	135	148	84	68	152	62.2	45.9	283	53.7
2012	119	131	95	79	174	79.8	60.3	250	69.6
2013	106	133	68	78	146	64.2	58.6	239	61
2014	117	118	83	65	148	70.9	55.1	235	63

TJC PASS RATE

Year	No Sat		No. Pass		Total Pass	% Pass		Total Sat	Overall % Pass
	Female	Male	Female	Male		Female	Male		
2011	78	33	26	8	34	33.3	24.2	111	30.6
2012	73	47	23	14	37	31.5	29.8	120	30.8
2013	66	49	30	7	37	45.5	14.3	115	32.2
2014	56	74	44	13	57	78.6	17.6	130	43.8

TSSC PASS RATE

Year	No Sat		No. Pass		Total Pass	% Pass		Total Sat	Overall % Pass
	Female	Male	Female	Male		Female	Male		
2013	66	32	26	13	39	39.4	40.6	98	39.8
2014	66	40	23	13	36	34.8	32.5	106	34.0

Table 3.5: TEACHERS LEVEL OF EDUCATION (ACADEMIC QUALIFICATION):

Qualification	ECCE	Primary (Years 1-8)	Secondary (Years 9-13)
Certificate in Education	39	9	0
Diploma in Education	5	65	7
Bachelors in Education	0	18	26
Master in Education	0	2	1
Doctorate of Philosophy in Education	0	0	1
No teaching qualification	15	0	30
Total	59	94	65

Annex 5: Excerpts from Relevant Reports, Policy Documents and Plans

Reference 1:

Government of Tuvalu (2010). Tuvalu Education Strategic Plan II – National Strategy for Sustainable Development (NSSD) 2011-2015 (TESP-II)

TESP II design framework came out of the Tuvalu National Development Plan (TK2) which linked the national, regional and international goals, to the national vision, mission and outcomes. On these, TESP II drew its own Vision, Mission, Values and Guiding Principles for 2011-2015, and drew out the intended outcomes/outputs and sub-outputs/strategies. TESP II also has its own monitoring and evaluation system linked to the corporate plans for education.

Our Vision: Quality education for sustainable living for all.

Our Mission: Provide and sustain excellence in education for all

Our Values: Respect for one another; Sharing and caring; Participation in community activities and decisions; Hard Work; Knowledge and acceptance of our cultural heritage and practicing one's culture; Responsibility and self-reliance; Spiritual values; Humility and tolerance; and Environment preservation

Our Guiding Principles

- Strong partnerships and cooperation amongst stakeholders
- Holistic education and provision of equal opportunities for all children;
- Development of a sense of pride in being Tuvaluan;
- Living and interacting sustainably with the environment and community;
- Inculcation of a spirit for life-long learning; and
- Nurturing of students to be motivated, resourceful and be able to live to the full.

The structure of TESP II uses an 'issue-based' approach rather than a 'sub-sectoral' format. The logframe structure is categorized into Outcomes, Outputs, Sub-Outputs and Strategies. TESP II is guided by five overarching key outcomes.

OUTCOME 1: To provide all children in Tuvalu access to a quality, flexible, relevant and modern curriculum and assessment system that promotes life-long learning and good citizenship. This will provide a more targeted approach to the development of learning resources to meet the ever increasing demand for wider learning opportunities enhanced by a more meaningful and transparent certification and assessment system with the primary aim to increase educational attainment.

OUTCOME 2: All children especially kindergarten, children living under difficult circumstances and those with special needs will have equal access to an expanding, inclusive, safe quality education and care system. This will provide more learning opportunities in the formal and informal learning environment coupled with the inclusion of those with learning special needs enhanced by removing barriers that hinders access. Inasmuch as universal access to basic education is concerned, maintaining is ultimately the priority. Resources require mobilization to increase access opportunities to TVET.

OUTCOME 3: Improved quality and efficiency of management through accountability, transparency and good governance processes. The Department of Education must demonstrate a key role in the management of the education system. Efficient management with accountability measures put in

place will ensure the little resources available will benefit many. Enhanced data management will increase information capability to provide information for more informed decisions making.

OUTCOME 4: A well-qualified, competent, committed and highly motivated workforce that can deliver education services of high quality with integrity and transparency. Teachers play a vital role in the education system therefore must be equipped well to meet the new challenges of the teaching profession. This will be achieved by the provision of supporting mechanisms both inside and outside the classroom to bring out the potential in teachers.

OUTCOME 5: Communities, stakeholders and donors are responsive to the education and development needs of students and maintain a culture of working together in genuine partnerships. This will meet the need to address societal and international expectations and foremost to enhance co-operation between those engaged in the delivery of education and the wider stakeholder society.

Outputs

Improve the relevance and quality of the curriculum.

Improve student achievement through provision of more transparent assessment practices.

Increase access and student participation at all levels

Provision of infrastructure and programmes to increase access and student participation

Improve the efficiency of management at all levels of administration

Improve the efficiency of data collection and management

Improve the management of qualifications at the national and regional level

Improve quality education

Strengthening partnerships between the Department of Education and the Kaupules; with community and stakeholders; partnership with and networking with businesses, NGOs, other government ministries and departments; conduct community support awareness programs with all stakeholders and school communities; and partnership with regional and international organisations
Strengthening collaboration with Ministry of Health with health promotion initiatives in schools.

Reference 2:

Government of Tuvalu (2013). Tuvalu MDG Acceleration Framework: Improving Quality of Education. Ministry of Education and Sports, and Ministry of Finance and Economic Development from the Government of Tuvalu and the United Nations System in the Pacific Islands.

The Millennium Development Goal (MDG 2) aims to ensure that all children will be able to complete a full course of primary schooling. Tuvalu has made significant progress in education and the target is highly likely to be achieved. However, while there has been significant progress in education sector performance in Tuvalu over the past decade, it still faces a number of challenges in achieving quality education...the MDG Acceleration Framework (MAF) constitutes a systematic means by which to identify the bottlenecks slowing down the implementation of MDG-based strategies and policies, and devise rapid-impact, well-structured solutions in the form of an action plan designed to streamline and synergize government and development partner interventions in order to enable Tuvalu to realize its priority MDGs.

Thirty-five key solutions were identified and prioritized, based on existing strategy documents and plans. These solutions, which are all identified for short- and long-term implementation, target each of the four types of interventions below:

Improvement of teacher professional standards: (1) Provide non-monetary incentives for teachers (e.g., 'Teacher of the Year' awards); (2) finalize and implement national teacher code of ethics; (3) develop a teacher mentor programme and provide mentor teacher training; (4) consider recruitment of expatriate teachers (including the use of volunteers, e.g., United Nations Volunteers (UNV), Peace Corps, Australian & Fijian volunteers) especially for schools with low passing rates; (5) strengthen leadership skills of school managers through ongoing training and mentoring; (6) develop and implement a monitoring and evaluation system to monitor teacher performance; (7) finalize and implement the teacher professional development policy, including designating one day per term for teacher professional development; (8) classify teachers to Year levels and posting to be based on such classification; (9) develop and implement a performance-based management system whereby financial incentives (i.e., salary increments or bonus) for teachers are linked to performance; (10) develop and implement a teacher posting policy along with a monitoring and evaluation framework to monitor classification and posting of teachers.

Implementation of outcome-based curriculum: (11) Incorporate internal assessment (IA) into Years 7 and 8 assessment; (12) develop and implement outcome-based curriculum for Years 1-7 for basic science and social science subjects; (13) conduct training for teachers on outcome-based curriculum approaches and provide ongoing capacity support; (14) revive the national curriculum and assessment committee to coordinate and monitor this curriculum reform initiative; (15) incorporate gender in school's curricular and extra-curricular activities; (16) sensitize teachers to advocate for gender issues in schools; (17) invite guest speakers on gender issues to promote awareness in schools; (18) increase daily teacher-student contact hours for Years 7 and 8 from six to eight hours; (19) promote voluntary school feeding programmes among parents, particularly for Years 7 and 8.

Improvement of literacy and numeracy proficiency (TUSTA): (20) Provide extra support and tuition during or after hours for Year 8 students who are performing poorly or borderline cases; (21) develop and implement literacy and numeracy assessment for Year 2; (22) provide ongoing capacity support and training to teachers to enable them deliver TUSTA objectives; (23) implement recommendations of previous TUSTA reports; (24) develop and implement literacy and numeracy assessment for Year 8; (25) provide extra support and tuition during or after hours for Year 8 students who are performing poorly or borderline cases.

Improvement of institutional capacity of Ministry of Education: (26) Realign and clarify existing staff positions and roles so as to maximize use of existing staff resources; (27) update, formalize and

implement the revised EdDep (Department of Education) organizational structure, focusing particularly on recruitment of new and additional staff positions; (28) strengthen EdDep monitoring and evaluation functions aimed at ensuring effective implementation of various priority education initiatives; (29) establish MOUs with each Kaupule identifying clear roles of Kaupule with regard to school-based management, monitoring teacher attendance, classroom maintenance, teacher housing, etc.; (30) mobilize required resources (technical and financial) to implement the agreed MOUs, including establishing partnerships with regional and international organizations; (31) establish MOUs with other relevant stakeholders (i.e., other government ministries, parents, PTA, TANGO, TNCW, TuFHA, churches, businesses) on ways in which those groups could help deliver or facilitate educational services (e.g., parenting classes, roles of parents in supervising homework, student reading programme, voluntary school feeding programme, special programmes for Year 8; (32) identify key education programme activities (e.g., under MAF) that could be funded using increased budgetary resources for education; (33) implement MTEF recommendation to prioritize allocation of budget resources (both domestic and external) towards basic education; (34) ensure recurrent costs of donor-funded programmes are integrated into the national budget so as to ensure impact of project initiatives are sustained after project completion; (35) make the use of Government grants to Kaupule earmarked for education more transparent.

Implementation of the MAF Action Plan

The MAF Action Plan, which is aligned with the Tuvalu Education Strategic Plan II 2011-2015, is one of the main outcomes of the process for the acceleration of MDG 2. It specifies in detail the necessary interventions, the costs associated with each action and the various actors and partners involved in implementation. It covers the period 2013 – 2015. Most of the interventions extend over a period of three years. The total cost of the three-year plan is estimated at US\$1.8 million.

Financing for the interventions approved under the MAF will be sourced from many diverse but complementary partners, including the Government of Tuvalu and development partners. Mobilization of resources from these different sources will have to be a concerted effort.

The successful implementation of the MAF Action Plan is dependent on a certain number of principles: (i) a high level of ownership by Government and its partners; (ii) commitment on the part of partners identified by the exercise in mobilizing the necessary financing; (iii) a monitoring-evaluation system for the process; and (iv) acceptance of the MAF document by all stakeholders in education, including communities, parents, Kaupule, churches, NGOs, the private sector and as well as the development partners and international and regional educational institutions.

Reference 3:

Government of Tuvalu (2005). Te Kakeega II National Strategy for Sustainable Development 2005-2015, Ministry of Finance, Economic, Planning and Industries, Economic Research and Policy Division, Tuvalu Government

VISION: The National Summit for Sustainable Development posed a question: How do we, the people of Tuvalu, raise the national standard of living, for every citizen? The Malefatuga Declaration, which arose from the NSSD, contains the “Vision” that was unanimously endorsed by the delegates at the NSSD:

WE, the representatives at the Tuvalu National Summit on Sustainable Development; comprising all island Head Chiefs and Presidents of Island Councils, Cabinet Ministers and Members of Parliament, representatives of civil society and the private sector, government ministries and departments, development partners and Tuvalu expatriates;

RECOGNISE the importance of sustainable development - [that is] development without compromising the ability of future generations to meet their needs-and endorse the Vision of “By 2015, guided by strong spiritual values enshrined in its motto -‘Tuvalu mo te Atua’1 -we will have achieved a healthy, educated, peaceful and prosperous Tuvalu.” (p. 1, NSSD)

Education and Human Resources - Key Policy Objectives:

- Improve overall education standards.
- More highly-trained and motivated primary, secondary, and post-secondary teachers.
- Adequately maintained schools with better more appropriate facilities.
- Provide more classroom materials to improve the teaching and learning environment.
- Install sound, consistent more appropriate curriculums that better target the needs of students and the economy.
- Expand and improve technical and vocational training opportunities.
- Make math and science subjects, and technical and vocational training a central part of school curricula. Expand services and facilities for special needs students, including pre-schoolers and the disabled.
- Higher retention in-country of returned overseas scholarship students.
- A comprehensive Human Resource Development Policy and Institutional Framework.

Education and Human Resources: Priorities and Strategies 2005-2015

Teaching and learning:

- increase teacher training and skill upgrading; and
- provide adequate classroom equipment and materials to support the curriculum, including libraries and text books.

Environment for teaching and learning:

- upgrade and maintain school facilities (including dormitories, kitchens, staff houses, etc.) to a standard conducive to teaching and learning in a healthy environment; and
- review career and salary structures of the education service to reflect the priority and importance placed on education.

School curriculum:

- review and redevelop school curriculum’s to better meet the needs of students (and the economy);
- expand vocational and technical education;
- expand and improve instruction in mathematics, computer, and science subjects;
- add courses in local customs, culture and traditions skills; and

- offer student counselling to guide career and personal development.

Education services for special need students:

- provide government support to worthy private schools; and
- provide special needs education for preschoolers, disabled and handicapped, with NGO support.

Management of the education system:

- increase the number and improve the quality of school inspections;
- certify that inspection recommendations are complied with;
- Department of Education to regulate and manage pre-schools;
- establish junior secondary school system;
- consult with the private sector so labour market needs are better met;
- TMTI is on and stays on the IMO White List;
- amend bonding policy to retain a higher number graduates in-country;
- provide more information on the labour market; and
- formulate and implement a Human Resource Development Policy and Institutional Framework.

Reference 4:

Government of Tuvalu (2005). Te Kakeega II Mid-Term Review: Action Plan, Ministry of Finance, Economic, Planning and Industries, Economic Research and Policy Division, Tuvalu Government (Relevant sections from the Strategic Area 3, 5, 6, 7 and 8)

Strategic Area 3: Social Development

Goal: Provide Tuvaluans with the highest attainable standard of health, adequate accommodation and an active life free from hardship and gender discrimination

Key Performance Indicators:

1. Strategic Health Plan used in decision-making
2. Amount of budgetary resources saved from review of TMTS and NZMTS
3. Number of medical personnel trained in Pre-service and In-service
4. Number of doctors and nurses leaving the service to work overseas
5. Infant mortality rate
6. Under-five mortality rate
7. Proportion of 1 year old immunized against measles
8. Maternal mortality rate
9. HIV prevalence among population 15-24 years old
10. Proportion of population 15-24 years old with the correct knowledge on HIV/AIDs
11. Proportion of population with advanced infection with access to antiretroviral infection
12. Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)
13. Contraceptive prevalence rate
14. Adolescent birth rate
15. Antenatal care coverage
16. Incidence of deaths associated with malaria
17. Tuberculosis incidence, prevalence & death rates
18. Percentage of tuberculosis detected & cured under observed treatment short course
19. Ratio girls: boys in primary, secondary tertiary education
20. Number of youth businesses & number of youth in businesses
21. Number youth facilities provided on Outer Islands
22. Share women wage employment and non-agricultural sector
23. Proportion of parliament seats held by women
24. Ratios of girls to boys in primary, secondary and tertiary education

Strategies	Short-term Milestones 2013	Medium-term Milestones 2015	Long-term Milestones 2025
Improve the welfare and opportunities available to youth	<ul style="list-style-type: none"> - National Youth Policy endorsed by cabinet - Youth Operational Plan 2012 completed and implemented 	<ul style="list-style-type: none"> - National Youth Policy and Operational Plans are linked to TKII 	<ul style="list-style-type: none"> - National Youth policies and Operational Plans routinely produced
	<ul style="list-style-type: none"> - More training workshops mounted for youths in HIV/AIDs and healthy lifestyles - Youth trained in traditional knowledge skills through the Education Ministry's TVET Programme - Additional facilities for youth provided on outer islands - Microfinance scheme for youth business started - Increase involvement of Churches and NGOs in addressing youth issues 	<ul style="list-style-type: none"> - Youth aware and living HIV/AIDs preventative lifestyle - Number youths using sports facilities increased - More youth businesses in operation - Churches and NGOs active in youth affairs 	<ul style="list-style-type: none"> - Increase in the welfare and opportunities available for youths

Promote gender equity and expand role of women in development	- Gender mainstreamed into all sectors in TKII	- TKII implementation gender sensitized	- Achieved great strides toward gender equity
	- Land distribution laws reviewed to give custodial rights to women	- Gender equity in land distribution and custodial rights	- Gender equity in land distribution and women's custodial
	- Entrepreneurial training for women continued	- More women owned businesses	- Women contributed to private enterprise development

Strategic Area 5: Private Sector and Employment

Goal: To be the engine of growth and development providing employment and commercially sustainable service

Key Performance Indicators:

1. Number of applicants for investment under the Foreign Investment Act
2. Ratio of new businesses to total businesses per year
3. Ratio of new business loans to existing loan to businesses of financial institutions
4. Ratio of new jobs to existing jobs per year
5. Number of active employee accounts with NPF
6. Consumer Protection Council established
7. Number of consultations between GOT and the Tuvalu National Private Sector Organization (TNPSO)
8. Type of market information provided to private sector by the Department of Trade
9. Growth in employment of Tuvaluan in overseas labour markets

Strategies	Short-term Milestones 2013	Medium-term Milestones 2015	Long-term Milestones 2025
Improve enabling environment for private sector development	<ul style="list-style-type: none"> - Provided training through workshop in business finance, management and accounting. - Foreign Investment Act reviewed to reserve some sectors for local businesses and investors - Carried out study of primary production options for Private Sector development in Tuvalu 	<ul style="list-style-type: none"> - Skills in management, finance and accounting improved - Local investors capitalized on sectors reserved for them - Implemented study's recommendations 	<ul style="list-style-type: none"> - Skills in management, finance and accounting improved - Foreign Investment Act reviewed & recommendations implemented - Recommended primary production flourishing

Strategic Area 6: Education and Human Resource

Goal: Provide quality education that equips people with the knowledge, skills and attributes to achieve a higher degree of self-reliance in a changing world and one that is consistent with Tuvalu's spiritual values

Key Performance Indicators:

1. Teacher pupil ratio
2. Net enrolment in primary education
3. Proportion of pupils starting grade 1 who reach last grade of primary
4. Literacy rate of 15-24 year-olds, women and men
5. Ratio of Budget allocation for primary education to total education budget
6. Ratio of Budget allocation for technical and vocational education to total education budget
7. Pass rate at final examinations at primary and secondary schools in Tuvalu

Strategies	Short-term Milestones 2013	Medium-term Milestones 2015	Long-term Milestones 2025
Improve teaching and learning	Continued teacher training and skills upgrading	Improved teaching capacity for meeting demand for teaching in the economy	Teachers well qualified and continually trained - Quality education provided to students and
	Provided adequate classroom equipment and teaching materials, supplies to all schools	Schools adequately supplied with equipment, materials and supplies	Supply and equip schools and training institutions
	Continued maintenance of schools and upgrading school facilities, staff housing, dormitories, kitchen	Adequate school buildings and facilities well maintained	Schools well maintained
	Curriculum reviewed to better meet the needs of students and economy	Skill needs of the economy and students met	Curriculum relevant for the skill needs of the population
	Technical and vocational education expanded, TVET trials completed	Technical and vocational education meeting the employment needs of the labour force in Tuvalu and abroad	- TVET meets community needs for technical and vocational skills - More Tuvaluans qualified for jobs abroad
	Improved education and teaching of science, mathematics and computer Science	- Increased pass rate in science, mathematics and computer science in national and regional examinations - Increased proportion of labour force in technical and science sectors	More Tuvaluans qualified to enter the science profession
	- Provided adequate training infrastructure for Tuvalu Maritime Training Institute - Carried out study to reorientate TMTI training to include officer level training in addition to seafarer training	- TMTI adequately supplied with standard equipment for training seafarers to IMO standards - Study recommendations implemented	- TMTI graduates qualify to international standards of Seamanship - First Officers graduate from TMTI before 2020
	Continuing training courses in culture, customs and traditional skills in schools	Improved knowledge and understanding of culture and traditional skills	Population well informed about their culture and tradition
	Student counselling continuing	- Chaplain at Motufoua School paid by GOT - Students' personal problems well counselled	Counselling and counselling service part normal life in Tuvalu
Provide equal education opportunities for all	Increased GOT support to	GOT supported registered schools in the country	More equal education opportunities available in

	all registered schools and training institutions		Tuvalu
	Provided special needs education for preschoolers, people with disabilities with support from NGOs	Special education needs provided and catered for	Inclusive education available
Improve management of the education system	Continue the frequency and quality of school inspection	Students performance in academic and extra curricula activities improved	Improved management of the education system
	Continue certify and implement Inspection recommendations	Students performance in academic and extra curricula activities improved	Improved management of the education system
	GOT support sought for the implementation of Pre-school policy (ECCE Policy)	GOT committed budgetary support for pre-school education	- Pre-schools funded by Government - Pre-schools registered and administered by MEYS
	On-going consultation with private sector to better target teaching to the skill needs of job market	Curriculum designed to facilitate teaching of skills required by the market	Local skills needs of the market continuing to be met
	Bonding policy for GOT sponsored students amended	GOT approved bonding policy and policy is in force	More students trained under GOT scholarships are retained in Tuvalu
Improve OI [Outer Island] development	MEYS provided technical and vocational education to OI funded by <i>Falekaupule</i> Trust Fund (FTF)	Increased technical and vocational skills for employment in the economy	On-going cooperation between MEYS and <i>Falekaupule</i> in providing education

Strategic Area 7: Natural Resources

GOAL: Improve the management and use of natural resources for the sustainable development of Tuvalu

Key Performance Indicators:

1. Proportion of land area covered by forest
2. Carbon dioxide emissions, total, per capita and per \$1 GDP (PPP)
3. Consumption of ozone-depleting substances
4. Proportion of fish stocks within safe biological limits
5. Proportion of total water resources used
6. Proportion of terrestrial and marine areas protected
7. Proportion of species threatened with extinction
8. Proportion of population using an improved drinking water source
9. Proportion of population using an improved sanitation facility
10. Proportion of urban population living in slums
11. Number and types of agricultural tools distributed to active farmers
12. Number of Extension Officer added to the staff
13. Number of private entrepreneurs assisted by agriculture extension
14. Size of land acquired for agriculture production
15. Number of CFC exporting fish to the capital
16. Revenue from NAFICOT joint venture
17. Total revenues from fish licences and vessel-day scheme
18. Community Fishing Centres (CFC) Profits

Strategies	Short-term Milestones 2013	Medium-term Milestones 2015	Long-term Milestones 2025
AGRICULTURE			
Increase production and consumption of local produce	Agricultural extension service expanded and improved	- New Agric Extension officers added to staff - Agric. Extension Advisory programmes in all OI	Extension personnel offering sound advice & assistance to OI farmers
	Basic agricultural tools and equipment made more accessible	Agricultural tools and supplied to active farmers in OI	Farmers well supplied with tools appropriate for their farm work.
	Private entrepreneurs assisted to produce and market local produce	Number of private entrepreneurs assisted increase by 25%	All private entrepreneurs have been assisted
	Assisted in making more land available for agricultural production	More land made available for agric. Production	Assistance in securing land for agric. production continuing.
	Incorporated more agricultural subjects into school curriculum	Agriculture introduced into curriculum for TVET	Continuing teaching of agriculture in technical and vocational education
	More opportunities secured for training agriculturalists	2 more agriculturalist released on training	Staff adequate for the workload they carry
FISHERIES			
Improve the management of fisheries resources – inshore and EEZ	Integrated Fisheries Sector Development Programme formulated and implemented	Activities in the fisheries sector coherent and directed	New fisheries sector programme succeeded the old programme.
ENVIRONMENT			
Stop unregulated development and degradation of the environment especially on Funafuti	Green Growth programmes commenced	Green growth projects in biogas, waste to energy, biofuels, hydroponics gardening started and continuing marketing their products	Reduced carbon emission and saving on import of fossil fuels

Strategic Area 8: Infrastructure and Support Services

GOAL: Provide efficient quality infrastructure and support services that are competitively priced and sustainable

Key Performance Indicators:

1. Water storage capacity under GOT control
2. Number of buildings without guttering and rain tanks
3. Number of complaints about lack of maintenance
4. Number of infrastructure and utilities privatized
5. Proportion of homes and institutional buildings using alternative energy sources
6. Volume of imported fossil fuel per year over last 5 years
7. Public Utilities Profitability
8. Government Subsidies to Utility enterprises
9. Rate of increase in power consumption
10. Number of Households and people with internet access
11. Telecom traffic (phones, mobiles)
12. National Infrastructure Development Plan 2011-2025

Strategies	Short-term Milestones 2013	Medium-term Milestones 2015	Long-term Milestones 2025
Corporatize and privatize where possible government utilities	Reduced reliance on fossil fuel through energy conservation and use of alternative energy	<ul style="list-style-type: none"> - Completed projects converting to photovoltaic energy for all islands - Radio programmes continuing on alternative energy usage 	Country fully converted to renewable energy
	Use of fossil fuel and alternative energy monitored and managed	Renewable Energy and Energy Efficiency Unit continuing to manage and monitor fossil fuel and alternative energy usage	Country fully converted to renewable energy
	Continued training of staff for management of Renewable Energy	Staff qualified and managing well the goal of full conversion to alternative energy by 2020	Country fully converted to renewable energy
	<ul style="list-style-type: none"> - Encouraged government private sector partnership in the development of ICT - ICT Committee formed and overseeing development of telecom technology 	<ul style="list-style-type: none"> - Internet service efficient and available to all islands - Computer Crime Act passed and implemented 	Country securely integrated into the global telecommunication domain
Upgrade and maintain Transport	<ul style="list-style-type: none"> - Provided accurate and reliable observations, forecasts and warnings of weather and climate - Strengthened the manpower of the Met department. 	Strengthened manpower in the Met department able to provide accurate and reliable forecasts and warnings of weather and climate.	Public well informed about weather and climate information

Reference 5:

Internet Usage and Population Statistics for Oceania and individual country breakdown
(Retrieved on 24th March 2015 from <http://www.internetworldstats.com/stats6.htm>)

INTERNET USERS AND POPULATION STATISTICS FOR OCEANIA - 2015						
<u>SOUTH PACIFIC REGION</u>	Population (2015 Est.)	% Pop. of World	Internet Users, 30-Nov-2015	Penetration (% Population)	Internet % Users	Facebook 15-Nov-2015
<u>Total for Oceania</u>	37,158,563	0.5 %	27,200,530	73.2 %	0.8 %	18,239,110
<u>Rest of the World</u>	7,222,743,680	99.5 %	3,339,060,626	46.2 %	99.2 %	1,496,965,040
WORLD TOTAL	7,259,902,243	100.0 %	3,366,261,156	46.4 %	100.0 %	1,515,204,150
NOTES: (1) Statistics for Oceania were updated for November 30, 2015. (2) Facebook subscribers were updated for November 15, 2015. (3) Population estimates are based mainly on data from the US Census Bureau . (4) The Internet usage data comes mainly from figures published by Nielsen , ITU , GfK , Facebook and trustworthy local research sources. (5) For methodology, definitions and navigation help, please see the site surfing guide . (6) Data on this site may be cited, giving the due credit and establishing an active link back to Internet World Stats . Copyright © 2015, Miniwatts Marketing Group. All rights reserved worldwide.						

Internet Usage and Population Statistics for Oceania - 2015

<u>OCEANIA</u>	Population (2015 Est.)	Users, in Dec/2000	Internet Usage, 30-Nov- 2015	% Population (Penetration)	Internet % users	Facebook 15-Nov- 2015
<u>American Samoa</u>	54,343	n/a	17,000	31.3 %	0.1 %	17,000
<u>Antarctica</u>	2,700	n/a	2,700	100.0 %	0.0 %	2,700
<u>Australia</u>	22,751,014	6,600,000	21,176,595	93.1 %	77.9 %	14,000,000
<u>Australia, Ext. Terr.</u>	1,651	n/a	n/a	n/a	n/a	n/a
<u>Christmas Island</u>	1,502	464	790	52.6 %	0.0 %	790
<u>Cocos (Keeling) Is.</u>	584	n/a	n/a	n/a	n/a	n/a
<u>Cook Islands</u>	9,838	n/a	6,000	61.0 %	0.0 %	5,900
<u>Fiji</u>	909,389	7,500	380,125	41.8 %	1.4 %	370,000
<u>French Polynesia</u>	282,703	8,000	171,544	60.7 %	0.6 %	130,000
<u>Guam</u>	161,785	5,000	112,196	69.3 %	0.4 %	100,000
<u>Kiribati</u>	105,711	1,000	12,950	12.3%	0.0 %	8,400
<u>Marshall Islands</u>	72,191	500	18,000	24.9 %	0.1 %	18,000
<u>Micronesia</u>	105,216	2,000	31,197	29.7 %	0.1 %	21,000
<u>Nauru</u>	9,540	n/a	5,152	54.0 %	0.0 %	2,400
<u>New Caledonia</u>	271,615	24,000	240,000	88.4 %	0.9 %	240,000
<u>New Zealand</u>	4,438,393	830,000	4,162,209	93.8 %	15.3 %	2,800,000
<u>Niue</u>	1,190	450	1,100	92.4 %	0.0 %	870
<u>Norfolk Island</u>	2,210	n/a	770	34.8 %	0.0 %	770
<u>Northern Marianas</u>	52,344	n/a	15,980	30.5 %	0.1 %	2,700
<u>Palau</u>	21,265	n/a	7,700	36.2 %	0.0 %	7,700
<u>Papau New Guinea</u>	6,672,429	135,000	625,874	9.4 %	2.3 %	350,000
<u>Pitcairn Islands</u>	54	n/a	170	n/a	n/a	170
<u>Samoa</u>	197,773	500	54,000	27.3%	0.2 %	54,000
<u>Smaller Territories (4)</u>	3,950	n/a	n/a	n/a	n/a	n/a
<u>Solomon Islands</u>	622,469	2,000	56,022	9.0 %	0.2 %	34,000
<u>Terres Australes</u>	n/a	n/a	n/a	n/a	n/a	n/a
<u>Tokelau</u>	1,337	66	800	59.8%	0.0 %	140
<u>Tonga</u>	106,501	1,000	42,600	40.0 %	0.2 %	40,000
<u>Tuvalu</u>	10,869	n/a	4,300	39.6 %	0.0 %	2,000
<u>Vanuatu</u>	272,264	3,000	51,186	18.8%	0.2 %	27,000

Wallis & Futuna	15,613	n/a	3,500	22.4 %	0.0 %	3,500
TOTAL OCEANIA	37,158,563	7,620,480	27,200,530	73.2 %	100.0 %	18,239,110

NOTES: (1) Statistics for Oceania were updated for November 30, 2015 and Facebook subscribers were updated for November 15, 2015. (2) CLICK on each country name for detailed individual country and regional statistics. (3) The demographic (population) numbers are based mainly on data contained at the [US Census Bureau](#) . (4) The Smaller Territories (located in the Antarctic) include those of Chile, Norway, UK and US. (5) The most recent Internet usage information comes mainly from the data published by [Nielsen](#), [ITU](#) , GfK, Facebook and other reliable local sources. (6) For navigation help, definitions and methodology, please see the [site surfing guide](#) . (7) Data may be cited, giving due credit and establishing an active link back to [InternetWorldStats.com](#). Copyright © 2015, Miniwatts Marketing Group. All rights reserved worldwide.

Annex 6. Terms of Reference from Commonwealth of Learning for the Consultancy

Country study Education development challenges and potential for flexible & open learning in Tuvalu

Terms of Reference

Introduction & background

Following a visit to Tuvalu in 2014, there has been ongoing dialogue between COL and the Director of Education regarding support for capacity building for flexible and open learning in Tuvalu. Like most developing nations, Tuvalu works to a rolling 10 year development plan – called Te Kakeega II (2005 – 2015).

The key objectives for education are:

- Improve overall education standards
- More highly-trained and motivated teachers
- Provide more classroom materials to improve the teaching and learning environment
- More appropriate curricula that better target the needs of students and the economy
- Expand and improve technical and vocational training opportunities
- Make math and science subjects, and technical and vocational training a central part of school curricula

The Department of Education is currently working to TESP II, the Tuvalu Education Strategic Plan for 2011 - 2015. The main objective of TESP II is:

*To provide all children in Tuvalu access to a **quality, flexible, relevant** and modern curriculum and assessment system that promotes **life-long learning** and good citizenship.*

At the September 2014 COL Focal Points meeting in Samoa, the Director of Education reported that open and distance learning (ODL) is used at the post-secondary and pre-tertiary levels mostly through the Tuvalu USP campus.

Top priorities for COL support in Tuvalu are:

- technical vocational and skills development (TVSD)
- open schooling (second chance education)
- youth and community development
- elearning and open education resources (OER) for teaching and learning in formal and non-formal environments
- quality community learning programme design and delivery

Country needs for further support to the national agenda of Tuvalu include:

Policy development

- develop elearning and ODL policy
- develop a national policy on open schooling
- develop and implement a national TVSD policy
- develop a monitoring and evaluation framework for TVSD

Capacity building

- develop national and organisational capacity for elearning and OER in formal and non-formal settings
- flexible and blended learning in both formal and non-formal settings especially TVSD
- Enhance the capacity of educators' skills in developing and using ICT and OER for learning materials

Development of learning programmes

- ODL learning materials for TVSD including OER
- Radio programmes for community and school programmes
- Secondary and post-secondary institutions to offer VUSSC and other COL courses and programmes

Challenges faced in Tuvalu

- Given the geographical locations of schools - isolation from one another and from the rest of the world - Tuvalu is challenged to explore the modes of delivery that will enable the delivery of quality learning programmes to schools and communities.
- Youth unemployment is another major challenge. Skilling youth in Tuvalu is a major challenge given the limited in-country opportunities available to them. Education beyond limited post-secondary education offered through private providers is scarce.
- Health and livelihood programmes also need to be well provided for through education, given the vulnerability of Tuvaluans to non-communicable diseases (NCDs) and as well as communicable diseases. ODL is perhaps one of the most effective modes of delivery that can be explored.
- Access to computers, telecommunication and networks is low with only about 23.4% homes having computers, and 37% of the population using Internet²¹.

In response to the findings of the 2012 – 2015 Programme evaluation and 2006 – 2015 Impact Evaluation, COL TVSD intends to work in fewer countries but in more depth. In the Pacific, COL intends to work in-depth in Tuvalu hence the need for this country study.

COL Programme Plan 2015 – 2021

In the new [Strategic Plan](#) the focus of COL's work has shifted towards learning for sustainable development – in line with the global sustainable development goals due to be launched in September 2015. There is an increased emphasis on the development of green skills training courses as OER and the integration of sustainable development concepts in all skills programmes.

The new COL programme plan aims to contribute to strengthened sustainable development through learning. There are three corporate long term outcomes (4-6 years):

- strengthened sustainable livelihoods
- Increased and equitable access to, and use of, quality learning opportunities
- Improved organisational capacity to leverage open and distance learning

There are five corporate intermediate outcomes (2-4 years):

- More curricula and learning resources in place which are relevant to sustainable development and gender-responsive
- Enhanced ODL capacity support through communities of practice and purpose
- More institutions and organisations take up and implement tested ODL models for scaling up
- More institutions and organisations implement or significantly improve ODL systems and practices for quality learning opportunities

²¹ Data of 2013 retrieved from <http://www.itu.int/net4/itu-d/icteye/CountryProfile.aspx>

- More governments and organisations adopt ODL policies and create strategies for quality learning opportunities

Gender

Gender is a cross cutting programme issue which has the planned outcome:

Strengthened capacity of partner institutions to mainstream gender in order to facilitate equal access to quality learning opportunities for male/female learners, leading to sustainable livelihoods.

Objectives of this study

The objective of this study is to map out the education development challenges faced in Tuvalu where a more flexible or technology-enabled approach might provide positive results towards national priorities and which are reflected in COL's planned programme outcomes.

It is against the initiative and COL corporate and cross cutting outcome statements and the targets in these indicators against which the results of the COL programme is to be monitored and evaluated. The objective of this study is to provide a baseline and plan against which a comprehensive country plan can be designed for Tuvalu. The activities will be spread across the relevant COL initiatives according to the absorptive capacity of the Tuvaluan partners.

Scope of Work

The consultant will:

- review the new COL Programme Plan with particular focus on the strategic aims and planned outcomes for TVSD, open schooling, technology enabled learning and teacher education, to understand the potential for support to Tuvalu in these areas
- carry out a desk study to include a review of existing country resources and online data collection through key respondents.
- collect data to identify the number of individuals in need of capacity building for technology enabled learning in schools and in the community;
- travel to Tuvalu to consult and engage with TVET stakeholders to understand the situational context and obtain guidance on the needs and challenges
- collect data on the development challenges in Tuvalu to which a more flexible and open approach to education might provide solutions
- review the relevant policy context to include (but not be limited to) National ICT Policy and development policies
- prepare a summary situational analysis of the policy context and education challenges in Tuvalu in narrative and statistical form.
- make recommendations for a COL country plan of activities in Tuvalu for 2015 – 2018, taking into account, local capacity to work with COL and COL strategic plans and monitoring requirements.

DoE will facilitate the study to include:

- approve these terms of reference
- provide background documents on the Tuvalu and relevant current and previous development partner activity in the country
- facilitate the consultant's visit to Tuvalu and arrange meetings
- provide a list of stakeholders to be consulted

COL will manage the development of the study to include:

- contract the consultant to fulfil these ToRs
- pay all consultant fees and costs
- review all draft reports and provide professional input
- finalise the report and share it with DoE

Resources

Existing relevant resources on ODFL in Tuvalu have been placed in a DropBox.
Additional resources will be added as they are identified.

Deliverable

A country report as specified in this ToR.

Dr Alison Mead Richardson, Education Specialist TVSD

Dr Sanjaya Mishra, education Specialist technology Enabled Learning

27 August 2015