

# APPENDICES



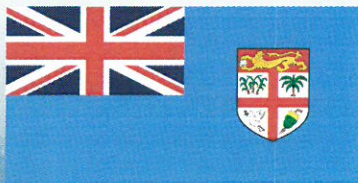
## **Appendix One**

**Written Evidence by the Fiji National University**



## **Annual Report 2017**

### **Standing Committee on Social Affairs**



**Professor Nigel Healey**  
**Vice Chancellor**

**1:30pm, 31<sup>st</sup> January 2019**



#### **Overview**

- Undergraduate curriculum reform
- Changes in the balance of provision
- Recovery in enrolments
- Reorganisation of Colleges
- Appointment of Pro-Vice-Chancellors
- New Construction projects
- Enhanced virtual environment
- Financial performance





## Undergraduate curriculum reform

- Reform based on:
  - 2016 Academic Portfolio Review
  - Rationalise mix of trimesters, semesters and pensters to semester/quarter mode
  - Standardise course credits (eg, bachelor's courses are 15 credit points, like USP)
- All certificates, diplomas, bachelors and honours courses reformed and curricula improved
- A number of new programmes developed, especially in engineering (360 credit diplomas)

3



## Changes in the balance of provision

	2016	2017
TVET	7,762	6,474
Bachelors	6,323	7,580
Postgraduate	585	773
Other	1,925	2,090
TVET	46.8%	38.3%
Bachelors	38.1%	44.8%
Postgraduate	3.5%	4.6%
Other	11.6%	12.4%

4





### Recovery in enrolments: headcount

	2014	2015	2016	2017
NTPC	14,671	12,024	9,363	10,148
CAFF	1,268	1,219	1,252	1,196
CEST	6,407	5,180	4,703	4,602
CBHTS	6,492	5,331	5,589	5,814
CHE	3,201	2,788	2,650	2,911
CMNHS	2,485	2,493	2,401	2,394
<b>Total</b>	<b>34,524</b>	<b>29,035</b>	<b>25,958</b>	<b>27,065</b>

5



### Recovery in enrolments: EFTS

	2014	2015	2016	2017
CAFF	943	823	804	840
CEST	2,825	2,265	1,921	2,064
CBHTS	2,643	1,996	1,970	2,157
CHE	1,661	1,259	1,297	1,573
CMNHS	2,485	2,493	2,401	2,394
<b>Total</b>	<b>10,557</b>	<b>8,836</b>	<b>8,393</b>	<b>9,028</b>

6



## Reorganisation of Colleges

- Former historic structure of faculties, schools, departments, centres – each with different “flavours” of line managers
- Common structure:
  - Schools: clusters of cognate departments contributing to common teaching and research programmes (eg, Management)
  - Departments: discipline-based “homes” for academic staff (eg, Marketing)
  - New Heads of School, Heads of Department on common T&Cs

7



## Appointment of Pro-Vice-Chancellors

- Two new Pro Vice Chancellors (Learning & Teaching) / (Research)
  - Interim internal appointments, pending international recruitment and selection exercise
  - Supported by college-based Associate Deans (Learning and Teaching) / (Research)
- Drive the University’s core business of learning & teaching and research

8





## New Construction projects

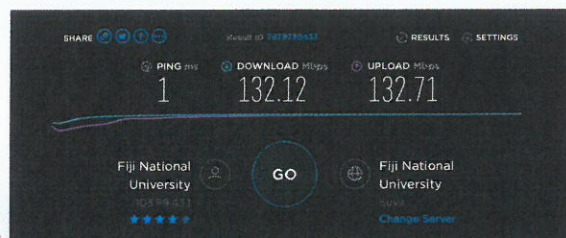
- Labasa campus
- Animal hospital and laboratories at Koronivia
- Fiji Maritime Academy – 2-storey building
- Plus planning for:
  - Sports complex at Nasinu
  - Business school & student services centre at Nasinu
- Repairs and maintenance doubled from \$4m in 2016 to over \$8m in 2017

9



## Enhanced virtual environment

- With Fiji Government support, planned connection to Australian Academic Research Network (AARNet)



- Moved libraries to open learning commons

10



## Financial performance

	2015	2016	2017
Government operating grant	33.4	42.6	49.7
Tuition fees	61.7	58.7	61.2
Other income	48.1	47.5	45.9
<b>Total income</b>	<b>143.2</b>	<b>148.8</b>	<b>156.8</b>
Employee-related expenses	(70.3)	(72.6)	(85.3)
Other operating expenses	(51.2)	(44.5)	(44.6)
Depreciation	(11.3)	(11.0)	(10.7)
NTPC levy expenses	(7.4)	(6.8)	(7.6)
<b>Total expenses</b>	<b>(140.2)</b>	<b>(134.9)</b>	<b>(148.2)</b>
<b>Operating Surplus</b>	<b>3.5</b>	<b>15.5</b>	<b>12.4</b>
Operating Surplus % Income	2.5%	10.4%	7.9%

11



## Vinaka

- For more information:
  - [vc@fnu.ac.fj](mailto:vc@fnu.ac.fj)
  - Tel: 339-4000 Ext 2000
  - Cell: 999-6622

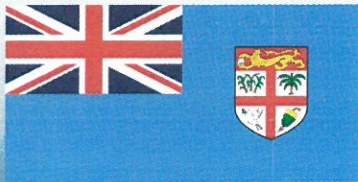
12





## Annual Report 2017

### Standing Committee on Social Affairs



**Professor Nigel Healey**  
**Vice Chancellor**

**1:30pm, 31<sup>st</sup> January 2019**



#### Question 1

- Brief the committee on the functions of Fiji National University.
- *As the national university, the functions of FNU are:*
  - *To provide technical training and higher education which meet the needs of employers and underpin the nation's economic development.*
  - *To undertake applied research which addresses societal needs in Fiji.*
  - *(To provide thought leadership and connect Fiji to the rest of the world.)*



## Question 2

- Inform the committee of the key challenges FNU faces whilst trying to achieve its strategic objectives and how it is planning to overcome these challenges.
- A) Staffing

Challenges	Responses
Academically-qualified staff	Overseas scholarships In-service part-time study
Retention of expatriate staff	Support from Immigration Department
Skilled teaching staff	In-service part-time study (eg, TVET teaching)
Skilled support staff	Market force payments

3



## Question 2 (cont'd)

- Inform the committee of the key challenges FNU faces whilst trying to achieve its strategic objectives and how it is planning to overcome these challenges.
- B) Resources

Challenges	Responses
Residential student accommodation	Investment banks Public-private partnerships
Campus master plan	Work with government Phase developments
Financial sustainability	Tuition fee review

4





### Question 3

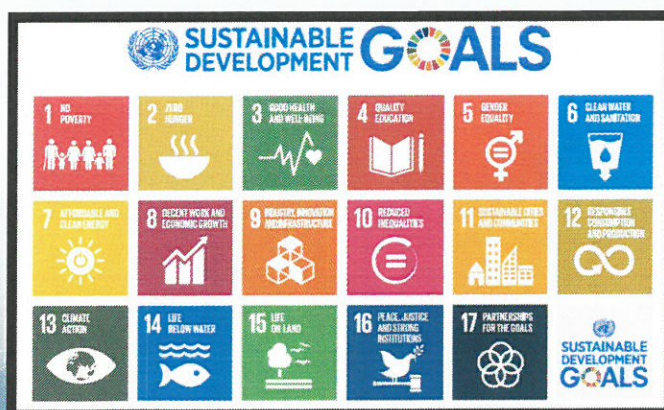
- How does FNU ensure that both male and female employees are treated equally in recruitment, training, hiring and promotion?
- *FNU's HR policies are non-discriminatory.*
- *There is a well-developed staff development policy.*
- *We have a programme to promote women in leadership.*
- *We monitor gender balance at different levels.*

5



### Question 4

- Does FNU align itself to any of the SDGs? If so, can you enlighten the Committee on this? In particular, explain how FNU incorporates SDG4 in its operations.



6



## Questions 4 (cont'd)

SDG	FNU alignment
2. No Hunger	CAFF: food and crop
3. Good health and well-being	Research theme
4. Quality education	Core business of learning & teaching
5. Gender equality	Core value
7. Affordable and clean energy	CEST: renewable energy
8. Decent work and economic growth	Alignment of programmes with current and future employment
13. Climate action	Research theme, Interdisciplinary masters
17. Partnerships for the goals	International partnerships

7



## Question 5

- Update the committee on FNU's future plans and initiatives.
- *2017 Annual Report is already 13 months out of date.*
  - *Major progress in 2018 in curriculum development, digital infrastructure (Digital FIJI), physical infrastructure, changes in HR policy*
- *Future plans:*
  - *University Management Information System 2020*
  - *10-year campus master plan: investment in new buildings and consolidation of campuses*
  - *Blended learning to use physical estate more intensively*

8





### Question 6

- Inform the committee on whether the University offers plumbing courses and the process involved to become a plumber.
- *FNU offers a Certificate 4 in Plumbing & Sheetmetal – 4 quarters of 8 weeks plus 6 months work experience.*
- *To become a plumber (ie, obtain a Waterworks Fitter's Licence) the person must have:*
  - *Certificate 4 in Plumbing & Sheetmetal (or equivalent);*
  - *four years of water works experience;*
  - *pass the Waterworks Fitters Licence Examination set by the Department of Water and Sewerage in consultation with FNU.*
- *Water Authority Fiji has taken over licensing plumbers and the arrangements are presently being renegotiated.*

9



### Question 7

- Inform us on whether there are sufficient staff available at the FMA to conduct trainings for captains.
- To become a Master Class 1 and Captain of a large ship requires:
  - Bachelor in Nautical Science – developed by FMA and approved by Senate, awaiting accreditation by MSAF
  - Sea time on a large ship
  - Certificate of Competency for Master Class 1 (management level) from MSAF
- FMA has sufficient Master Class 1 principal instructors, but they will need support (planned) to deliver the academic components of Bachelor in Nautical Science

10



### Question 8

- Are there plans to carry out a [Academic Portfolio Review] exercise for the University's postgraduate programmes?
- *Academic Portfolio Review (APR) is intended to be an annual exercise and we are currently installing a new University Management Information System and developing a database on graduate outcomes.*
- *This will allow the APR to be run for all programmes on an annual basis, including postgraduate programmes, as part of the new internal Quality Assurance framework being developed by the new Pro Vice Chancellor (Learning and Teaching).*

11



### Question 9

- "Emphasis of Matter": Provide an update on whether the issue of finalisation of the transfer of lease arrangements has been resolved.
- *As of 7 January 2019:*
  - *FNU has proper titles to 13 properties.*
  - *FNU has approval notices for 4 properties - Nasese, Labasa, Natabua, Nasinu – and 1 application for new lease for Legalega – all are in process for proper title.*
  - *Transfers are in process for 4 properties – Koronivia, FSN (Tamavua), FSM (Pasifika), McGregor and Falekau Property (Lautoka).*
  - *Discussions are underway with Lands Department for 3 properties – Hoodless House, PCP and Kivi House used by FNU, but still registered with the Ministry of Health.*

12



## **Appendix Two - Supplementary Response**



5<sup>th</sup> March 2019

Hon. Viam Pillay  
The Chairman  
Standing Committee on Social Affairs  
Parliament of the Republic of Fiji Islands  
Government Building  
Suva

Dear Chairman,

Thank you for your letter dated 28<sup>th</sup> February, requesting further clarification of Fiji National University's 2017 Annual Report. Please find my detailed answers to the questions from the Standing Committee on Social Affairs below:

**1. Apart from the overseas scholarships provided to University staff to undertake a PhD, what type of assistance is given to those staff who may wish to further their studies locally?**

Staff are encouraged and financially supported to take higher qualifications locally, either at FNU or one of the two other universities in Fiji. Staff who are studying part-time for higher qualifications as part of an agreed professional development plan are currently eligible for their tuition fees to be reimbursed at the end of each semester. The University has reviewed its human resources policy and agreed, subject to approval by Council, that tuition fees for staff studying part-time at FNU will be waived from 2019.

The University has developed a range of new programmes designed primarily to enable staff to upgrade their qualifications in-service. These include a new Masters of Engineering and Master of Science, a PhD programme and a suite of teaching qualifications for TVET instructors – eg, Bachelor of Education (TVET), PG Diploma (TVET), Master of Education (TVET). The PhD regulations have been benchmarked on a UK university and we are seeking experienced supervisors in partner universities in Australia and New Zealand to co-supervise our staff doing PhDs.

To further incentivise staff to upgrade their qualifications, contract renewals are conditional on staff making satisfactory progress to achieving the minimum academic qualification (MAQ) for the rank they hold, where their current qualifications are below this level. Academic promotion is contingent on first achieving the required MAQ. For example, promotion to Assistant Professor and above requires a PhD (Fiji Qualifications Framework Level 10); promotion to Senior Instructor (TVET) and above requires a master's degree (Fiji Qualifications Framework Level 9).



**2. What are the possible mechanisms in place to accommodate the retention of expatriate staff so that students are not affected?**

Under the current legislation, the University only makes three-year appointments and is required to advertise the position of an expatriate member of staff midway through his/her third year, to ensure that there is not a local candidate who is at least as well qualified. As a consequence, some expatriate staff begin looking for a new job overseas as they complete their second year, because they cannot be sure that their contract will be renewed, even though there is a shortage of qualified staff locally. This is very disruptive to teaching and research, as they are likely to leave partway through their third year as soon as they get another job overseas. Even if their contract is renewed, the uncertainty may undermine their morale and commitment to ongoing projects.

The possible mechanism that could alleviate this situation would be for the Immigration Department to grant approval for FNU to automatically renew contracts for expatriates in positions where there is a demonstrable local shortage. This would be the case for Assistant Professors and above who hold PhDs.

**3. What is the status of the University's prospective Public Private Partnership arrangement with Investment Fiji and Fiji Development Bank with respect to the building of additional hostels?**

In late 2018, FNU held a series of meetings with both Investment Fiji and Fiji Development Bank. Investment Fiji identified a potential partner which specialises in the construction of student hostels using prefabricated modular units, which is very cost-competitive. These units are presently manufactured in China, but Investment Fiji is looking for local investors to set up a manufacturing facility here in Fiji, to ensure that the value-added is captured by Fiji capital and labour. FNU has committed to this project in principle and we will be following up with Investment Fiji this year, now that our Campus Master Plan is complete.

**4. The committee has been informed that the University has land available on which to build accommodation facilities. Please advise us on how much land is available and where.**

At present, the University has 2,000 beds (which can house approximately 10% of the student population) which are located at our Natabua, Koronivia, Nasinu, Tamavua, Samabula and Pasifika campuses. The Campus Master Plan envisages the following additional accommodation:

- a) Nasinu – 1750m<sup>2</sup> x 4 levels (approx. 300 beds)
- b) Pasifika – 1100m<sup>2</sup> x 6 levels (approx. 300 beds)
- c) Tamavua – 4750m<sup>2</sup> x 2 levels (approx. 500 beds)
- d) Natabua – 1500m<sup>2</sup> (approx. 75 beds)
- e) Labasa – 500m<sup>2</sup> x 3 levels (approx. 60 beds)

In principle, there is also space to build additional hostels at Namaka and Koronivia.

5. How are the proceeds for the lease granted to Grace Roads being utilised and please inform us of the amount?

Sub –Lessees	Annual Rent	CT NO's	Area Subleased		Purpose of Sublease
			Hectares	Acres	
Grace Road Company (Rice Farm)	\$47,000.00	Pt of 25242	95.1011	234.999	Rice cultivation integrated with livestock farming
Grace Road Company (Livestock Farm)	\$68,835.00	CT 25037	139.2827	344.1750	Dairy farming and livestock

The proceeds from the annual rent of \$115,835 from the two Grace Road sub-leases are being used to defray the annual rental on the Navua property (\$129,000 plus VAT) and recoup the original purchase price of the lease (approximately \$1m). The lease conditions allow FNU staff and students to visit the Grace Road operations for teaching and research purposes. In this way, the Navua property is being used for the purpose for which it was originally acquired (teaching and research), while avoiding the need to use University operating funds to pay for either the purchase of the lease or the annual rent.

6. Has Phase 2 of the new Labasa campus which includes student accommodation commenced?

No. Phase 1 of the project is presently under construction. This includes the main teaching and administration building (5,000m<sup>2</sup>), car parks, fencing, lighting, and landscaping. Phase 1 is scheduled for completion at the end of 2019. Phase 2 includes a student hostel and workshops and will commence in 2020, subject to Government funding. A request for Phase 2 is part of FNU's budget proposal to Government for the 2019/20 fiscal year.

7. What impact will the Campus Master Plan have on the student accommodation issue?

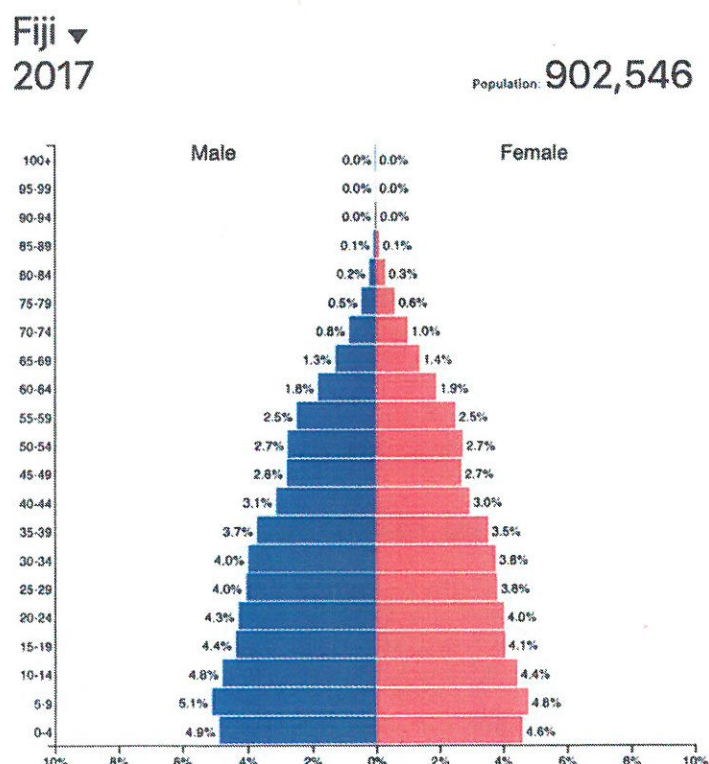
The Campus Master Plan has zoned each campus, so that land is allocated for a) learning and teaching b) administration c) student residential accommodation d) recreation and sporting activities. We have set aside zoned space for future hostel development (see 4 above). The rate at which these plans are realised will depend on funding and/or the conclusion of a suitable Private Public Partnership (see 3 above).



8. How does FNU plan to attract more students in order to further increase its student enrolment?

The Tertiary Scholarships and Loans Board (TSLB) estimates that approximately 70% of students who complete Year 13 presently go to university with either scholarships or tuition/study allowance loans and a further 15% enrol in university as privately-funded students.

Unlike many European and East Asia countries, Fiji has a healthy demographic profile and the number of 20-24 year olds will continue to grow modestly for the next 15 years (see diagram below), although it will start to decline thereafter.



Given the current high tertiary enrolment rate and the relative stability of the university age population, the University does not plan a major expansion in total enrolments. However, we are planning for three trends:

- The investment in the new Labasa campus as part of the Government's 'Look North' strategy should see a greater proportion of students from Vanua Levu and the Northern Division staying in Labasa for their university education, supporting the economic revitalisation of the area and reducing pressure on student accommodation in the Suva-Nausori Corridor.
- The future growth in enrolments is likely to mainly come in part-time postgraduate education, as more and more working professionals seek to upgrade their qualifications to remain competitive in the labour market and upskill as the economy changes. This growth is manageable because it uses existing resources more

intensively – part-time students tend to study in the evening and weekends, whereas full-time undergraduate teaching is done in the daytime.

- c) The University's investment in its digital infrastructure and the roll out of the DigitalFIJI initiative will allow the University to increase the range of blended courses, so that students in both the smaller campuses and those who want to study from home will have greater access to higher education.

**9. Provide details on whether there are plans in place to review the University's tuition fees, taking into consideration the impact of such a review on all students?**

The University has not changed its tuition fees since 2013. This means that, as inflation has reduced the real value of the tuition fees, the University has had to rely increasingly on Government operating grant to maintain a balanced budget. Almost all public university systems are funded by a mix of public subsidies (government operating grants) and private finance (tuition fees which are either paid by student directly, or indirectly through a government loans scheme). The mix of public and private funding is a political decision, particularly in Fiji where the Government funds and underwrites the tuition loans scheme – higher tuition fees would reduce the size of the Government operating grant needed, but increase the burden on the Tertiary Education Loans Scheme.

The University is currently undertaking an exercise to cost its programmes and work out the implications for tuition fees of changing the balance between public and private funding. Whether the Council decides to rise tuition fees will depend on the outcome of consultations with the Ministry of Education, the Ministry of Economy and the student body.

Yours Sincerely



.....  
**Prof. Nigel Healey**  
Vice Chancellor



## **Appendix Three - Verbatim Report**

**STANDING COMMITTEE**  
**ON SOCIAL AFFAIRS**

**[Verbatim Report of Meeting]**

**HELD IN THE**

**COMMITTEE ROOM (EAST WING)**

**ON**

**THURSDAY, 31ST JANUARY, 2019**



**VERBATIM NOTES OF THE MEETING OF THE STANDING COMMITTEE ON SOCIAL AFFAIRS HELD AT THE COMMITTEE ROOM (EAST WING), PARLIAMENT PRECINCTS, GOVERNMENT BUILDINGS, ON THURSDAY, 31ST JANUARY, 2019 AT 1.30 P.M.**

**Interviewee/Submittee:**        **Fiji National University (FNU)**

In Attendance:

Professor Nigel Healey        -        Vice Chancellor

---

DEPUTY CHAIRPERSON.- On behalf of the Committee on Social Affairs, I warmly welcome the Vice-Chancellor of the Fiji National University (FNU), Professor Nigel Healey. Thank you, Sir, for availing your time to be here with us this afternoon to present your FNU Annual Report 2017, and also with that we had already submitted questions for your perusal and for us to enlighten on them. So, we are here now, thank you very much. We give you this time to do your presentation. Thank you.

PROF. N. HEALEY.- Thank you for the opportunity to present the 2017 Report. I have got two presentations in two parts:

1.        As requested, a brief overview of the key elements of the report; and
2.        Answers to the questions that the Committee kindly gave me in advance.

And I think this is a good example of best practice to have the questions some time in advance so that we can make sure the answers are probably considered and factually correct.

In terms of the overview of the first part of the presentation, the points that I would like to really kind of highlight are the Undergraduate Curriculum Reform which was a huge exercise. It is an observation on the change in the balance of provision which is something that we are looking at very carefully. The recovery in enrolments that took place in 2017 has continued since, and then some changes in the organisational structure of the Colleges and the management of the University, and then just to finish with something about the physical and virtual environment and the University's financial performance.

So if we can go first to the Undergraduate Curriculum Reform. 2017 was my first full year in office, I arrived in August 2016 so we did a lot of planning in the second half of 2016; the things that we wanted to begin doing in the new academic year.

In 2016 we undertook something called Academic Portfolio Review, which was basically to assess all of our academic programmes in relation to three sets of indicators. Firstly, we looked at student demand - the number of students applying for the programmes and the ratio of applicants to places, et cetera.

The second set of indicators was student performance. Were students succeeding in the programme? Do they have high student satisfaction with a good progression rates and completion rates?

The third set of indicators was what we called Graduate Outcomes. Did the programmes achieve results in graduates who were employable? So we looked at percentage employment rates and average starting salaries.

The idea of that review was to find out where there were weaknesses in our academic portfolio, so we could begin to correct those. However, while that exercise was going on in 2016, we decided based on the evidence that we had, to rationalise our provision around semesters and common course sizes. So we had a rather mixed economy where some Colleges would teach in courses in Trimester mode - three 15 week Trimesters, some were doing it in Semester mode – two 18 week Semesters, some were teaching courses in what is called Pensters, where there were five terms a year but much shorter (seven or eight weeks).

Because all the Colleges had previously been independent, the courses all had different credit sizes. So in Fiji we follow the New Zealand system - a fulltime programme is a 120 credits a year, but we choose our course sizes by throwing darts at a dartboard. We say; “Well, this is going to be a marketing course thrown at the dartboard and whether it will be 11 points. This is going to be an accounting programme, throw the dart at the dartboard, that is 16 points” and it was very confusing for students. It did not make a great little sense.

So what we did was, we decided to restructure the entire portfolio using the information from the Academic Portfolio Review, but restructuring and standardising the courses on Semesters and on common course sizes. So if you take a Bachelors Programme, a common course size is 15 credits, so a fulltime student would do four courses each Semester, giving 120 credits, 15 credits is the same.

Actually as it turns out, it is the same size courses as the University of the South Pacific (USP) but that is USP system based on New Zealand. So most Universities teach to a 15 credit point course in New Zealand, so we were standardising on the regional norm, if you like. But that exercise was vast, it probably involved 300 different programmes.

About 95 percent of the students in the University are on the Undergraduate Programmes. It is the biggest exercise I have ever been involved with. It is a huge overhaul of the portfolio. Normally, we have four Senate meetings a year which is the body that approves Academic Structures. We often were having two Senate meetings a month because we had such a heavy workload, but it was quite important to refresh the whole portfolio and to move us on to a common semester basis.

We also developed a number of new programmes in Engineering that are three-year diplomas. There are mixed students from Year 12 and this was in line with changes in government policy which allows students in Engineering to go directly to University from Year 12.

We wanted Diploma Programmes that would meet international accreditation standards, something called the Dublin Accord in order that they could achieve the Level 6 outcome and it became a three-year course. These diploma courses articulate directly into Bachelor of Engineering for those students that want to continue.

As the University is developing and maturing, the balance of provision between what we call TVET, the sub-degree provision - certificates and diplomas, that is gradually changing in favour of higher education. That is to say Bachelors, Masters and PhDs. And you can see just that snapshot from the last couple of years in the Annual Report, the changes that are taking place. So the overall numbers are increasing but the growth being at Bachelors and Post-Graduates level and more than a slight decline at the TVET level.



At the moment our system in Fiji is demand-driven. We only have quotas on certain medical degrees but most of it is demand-driven. Now, we are watching this very, very carefully because we think it is really important to maintain a high proportion of TVET students.

Many of the jobs in Fiji are in the trades, such as carpentry, plumbing, electricity, refrigeration, so we have been working quite hard to upgrade the TVET Programmes and upgrade the TVET staff to improve their teaching and improve delivery so that we can try to maintain the vibrancy of TVET. What we do not want to happen is what that has happened in Australia and New Zealand where universities like Queensland University of Technology (QUT) or Auckland University of Technology (AUT) in Auckland moved completely away from TVET. We think that would be a very retrospective step so we have been taking a number of measures to strengthen TVET provisions and improve/upgrade the quality of workshops, et cetera. So, we are tracking that very, very closely.

When I appeared before this Committee the last couple of times, I noted that the enrolments have been declining in 2015 and 2016. When I arrived and saw this decline in enrolments, I was quite alarmed by the sharp slide and you can see that overall the head count, the decline was in a region of 24 percent/25 percent between a peak in 2014 and 2016. A lot of that was in NTPC which runs very short courses. So, that slightly overstates the picture because NTPC, if they simply went from running one-day courses to running three-day courses, the number of headcount would drop but the number of students they actually engaged would not. Rather than doing three one-day courses, you do one three-day course and the headcount would be lower.

However, you can see in all the Colleges there was a decline and some of this was a direct consequence of the Technical College of Fiji starting in 2015. So, Colleges like CEST which is the engineering, CBHTS which is business and Hospitality, they previously had Certificate I and Certificate II Programmes which moved to the Technical College of Fiji. So some of these was a direct consequence of the restructuring of the tertiary education, but some of it was a loss of market share to other providers.

We focussed for 2017 on really trying to rebuild enrolment numbers. We had a very concerted enrolment campaign in the summer of 2016/2017 and you can see that the headcount increased in almost all the Colleges.

Overall, headcount increased about 4.5 percent, but if we go to the next slide which is perhaps more meaningful, this shows that. In the university sector, we really measure student numbers in equivalent fulltime students which is a more meaningful figure because as I said before, if you count headcount, then if a student comes for three different courses, that is three students.

And you can see here that in x terms, a decline from 2014 to 2016 was a little bit less. It was 20 percent in equivalent fulltime students and the recovery was much stronger. So the recovery was nearly 8 percent in 2017 and that recovery has increased in contingent 2018 and we are expecting it to continue again this year. We have kind of stabilised things and rebuild things.

The collegiate organisation is that in 2016 when I arrived, the Colleges all had different structures because they had all previously been independent of each other. So we just merged them but there was no real attempt to create a university culture so we had different organisational structures. Some had faculties, some had schools, some had departments, some had centres and the line managers all had different titles. Some were directors, some were heads of schools, some were associate deans and it was all over the place. They all had slightly different terms and conditions.

What we did was, we had quite a long consultation period and we finally agreed to restructure into a common structure for every College where we have schools. The Colleges are very large, they might have 200 or 300 staff, so we reorganised into schools which are basically groups of departments that contribute to a common teaching programme and common research themes. So if you can imagine the business world, you have got a school of management and then within the school of management, you have the different flavours of management. So within management, you might have human resource management, marketing, et cetera.

The academic department is a really disciplined-based home, usually around 20 staff who are working in the same discipline. Marketing, for example, but they contribute to the programmes of the school which should be the BCom. And then we basically had a call for expressions of interest and we appointed new heads of schools or new heads of departments on common terms and conditions. So by the middle of 2017, we had a wholly new middle management, all new middle management. These were existing staff but they had responsibility allowances for taking these duties on.

During 2017, we moved to a common university-wide structure, so it makes like very easy because now we can call all the heads of department together or all the heads of school together for meetings and they are all doing the same job in different Colleges on the same terms and conditions.

The other change we made in 2017 was to create Pro Vice-Chancellors. We previously did not have anyone. There was a Vice-Chancellor and the Deans but no one else. We appointed two Pro Vice-Chancellors; one takes the lead on learning and teaching, so as to drive the curriculum development and I pay a great tribute to the first Pro-Vice-Chancellor (PVC) Learning & Teaching, Dr. Eci Nabalarua. She was responsible for driving that huge curriculum reform as the interim Pro-Vice-Chancellor Learning & Teaching and Pro-Vice Chancellor Research to lead our research. Within each college, we had an Associate Dean Learning & Teaching working with the PVC and an Associate Dean Research.

That was designed to ensure that as a University, we had consistency in the way we managed our programmes across all the Colleges, and the same in terms of the way we manage research and support researches. Those were very significant structural and cultural changes that took place in June, 2017.

In terms of the physical infrastructure, we have moved forward on some very large projects during 2017. The Labasa Campus, we went through the appointments of all the different construction consultants, service engineers and so on and that actually broke ground; they started their construction, the phase of the building in year 2018. That is due for completion at the end of this year.

Phase 1 of Labasa Campus is about \$35 million all up. It is just outside the town centre over the bridge, on land that the Government allocated to us by the river. This Campus is built on an elevated platform because of flooding so the land is being raised by about 2½ metres to bring it above historic high lines, high tide marks and is adjacent to the new Damodar City Complex. We are planning in the next phase to put in residential accommodation there and is part of the Look North Policy. We think that this new campus and the co-location with Damodar City, there is a new McDonald's going in as well will be quite transformational for those in Labasa. The student numbers there have already doubled in anticipation of this Campus opening. We had only about 600 students, we have outreached to the schools and the numbers by 2018 was 1,200.

So, that was the really key thing that went underway. In 2017 we also designed the Animal Hospital and laboratories. That work is about to start, this is the Koronivia Campus, the Agriculture Campus. We constructed a 2-storey building for Fiji Maritime Academy which opened last year and we have a new 3- storey building under construction. We also began in 2017 the planning for the Sports



Complex at Nasinu. We have no indoor sports facilities at all at the present time, so we designed quite a state of the art gymnasium complex with an indoor basketball court designed to meet international standards for badminton, netball, volleyball, basketball and also a 4-storey Business School and Students Services Centre.

At the same time, we are planning new buildings in 2017, we doubled our spending on repairs maintenance from \$4 million to \$8 million. We have a lot of old buildings, those that are at end of life, we are tearing down and putting up new concrete buildings. Those that just need to be renovated properly, we are renovating. So all the student hostels, for example, we are renovating.

We also made a big drive in 2017 to enhance the virtual environment, our WIFI, our internet, we were using commercial internet providers and it was very slow and not fit for purpose at all in a modern university. With Government's support in 2017, we had an allocation in the June 2017 Budget, we began the process to connect to OurNet. That is the cable that comes into landing station in Suva, that connects us directly to the universities of Australia and New Zealand and then through the cable up through Hawaii to North America. Now what that gives us two things, it gave us super-fast broad band, so, this is a nuclear speed test, you can see on the screen, just under my office.

(Going through slide)

That is in the middle of the day when the sever is busy, but it is a 132 megabits per second which is extremely fast. In the UK, most commercial providers are about 10 megabits per second. Our internet provision here in Fiji is now better than most countries, actually, it is certainly a lot better than New Zealand. But, this is very fast, and it also gave us a lot of access to a lot of new software that we can use.

We use Zoom, so it moves a lot of things to now, we are not moving staff around, we are doing video conferencing and zoom is a very stable platform with this bandwidth. It is just like being in the room. We put digital conferencing facilities in all the campuses and we began the process of moving the Library to what is called Open Learning Commons where basically, we went through book stocks and moved most of the books stocks because they were old books that were not being used by students.

What we are doing here, we have moved the Library so that all our spending is on digital resources, so students and staff can access journals and books electronically. Now that means the cost of access comes massively down plus all the students can access simultaneously. If you buy a journal, only one person at a time can look at it, if you buy access to an online collection, all 20,000 of your students can access the journals simultaneously and they can download it to their laptops. So, what that means is that Libraries are not really book depositories anymore, there are places where students go to work, to sit and work in groups. As we have removed the books, we are keeping the high use text books and the reference books, but a lot of the other materials we have taken out, to create space for a sort of social learning environment and we put new furniture in and refurbished the Libraries and that is been very well received by the students.

Finally, the financial performance, our target is to aim for an operating surplus of 5 percent and 5 percent is kind of international best practice in the university sector. The reason you need an operating surplus is that, together, depreciation which is where you are basically setting aside money to replace buildings that are wearing out and operating surplus, those two go into your reserves, so depreciation is not a cash expense. So we are putting in last year, for example, we put into reserve about \$23 million. That is what funds your capital programme. So if you did account for depreciation and you did not run an operating surplus, you have no resources to build. The depreciation is only giving you resources to replace the buildings you have already got. You need some operating surplus if you are going to invest in new facilities, for example, the gymnasium.

We have been trying to follow the New Zealand Tertiary Education Commission Guidelines which are 5 percent surplus. The reason it is a little bit above 5 percent is that you always get a bit of underspend, if you are controlling your costs, you will always have a little bit of underspend each year. You can see that total expenses went up quite significantly as did our revenue. Our revenue went up because particularly our tuition fees again to increase, we got a little bit more Government Grant but the main reason why the expenses appear to be high relative to 2016 is we underspent rather badly. You can see that our operating expenses actually dropped \$6 million between 2015 and 2016.

We had a lot of vacancies we were not filling, we did not spend the budget we allocated for repairs and maintenance and we got a grip of all of that in 2017. It is not that it has been a sudden blow out of expenses, it simply that we actually spent according to budget in 2017. We slightly exceeded our budget surplus of 5 percent.

The University I think is in pretty good shape financially, we are rebuilding our tuition income and this tuition income is coming back up again. We have not actually increased tuition fees since 2012 so in nominal terms they have not changed.

Hopefully, that gives you an overview of the Report. There were a lot of activities in 2017. It was aimed at improving the quality of the Academic Portfolio, it was aimed at improving the physical and digital resources for students. As a consequence, we did start to see about an 8 percent increase in enrolments. I am happy to take any questions on what I have just presented or I can go into detailed questions.

DEPUTY CHAIRPERSON.- Thank you for the report. We will just move on to the questions.

PROF. N. HEALEY.- All right.

DEPUTY CHAIRPERSON.- You will work on the questions and then supplementary questions will follow after.

PROF. N. HEALEY.- All right, it is perfect. The first question was just to really outline the functions of Fiji National University. I think the functions of any University is to provide education, teaching and undertake research. I think in the case of FNU, we are what is called dual-sector university. Let us say we have both TVET provision at Certificate and Diploma level and higher education that is Degree and Postgraduate level. Our core function as the National University is to provide both technical training in higher education to meet the needs of employers and to underpin the country's development.

In our teaching programmes, graduate employability is for us the most important performance indicator. We are funded by taxpayers in order to educate so the people can get good jobs and keep driving the very rapid economic development of the nation.

The second area that all Universities have is to undertake research but again as the National University, we interpret that slightly in a more newest way as to undertake applied research that has social impact. So, we have aligned our research priorities or research interests with national priorities in Fiji. So, we are not really focussing on "blue skies" fake conceptual research. We are trying to focus on research applied in the Fijian context that contributes to a better understanding. Let us take some examples: One of our biggest health problems is obesity and the associated NCDs, heart disease, Type 2 Diabetes. So, we are trying to reduce those in a number of interventions: in schools through teacher-training; through work we are doing, in business area; looking at tax - what is the impact of tax, like sugar taxes, fizzy drinks taxes on consumer behaviour; looking in the medical school at ways of diagnosing and treating diabetes more quickly.



Climate change is another area. The climate change that will impact Fiji over the next 50 years is already in the system, so although there is valuable research taking place around the world on the impact of climate change and how climate change is being affected by sort of greenhouse gases, et cetera, a big challenge for countries like ours is to adapt to the climate change that is going to come. There is nothing we can do about it. If the Paris Accord was target for heat today, the climate change will continue because of the lags in the system, intensifying cyclones, the salination of soil, the coastal erosion and these are all things we need to respond to so we are trying to focus research on that kind of thing.

So, we are really going to get the people in the research that we support and address real needs here in Fiji. The area put in brackets is not something that many universities would, I think recognise but it does seem to us, I should say, as the National University, we do have a role in providing leadership in some areas because we are internationally connecting Fiji to best practice globally through our programmes in our research. To give a concrete example of that, on NCDs, we are doing research to try to kind of inform people but as a National University, the question is, what are we doing to provide leadership? So, what we have done is, we have just broken ground on a new sports complex. That complex is not designed for elite sports people, it is designed primarily for recreational sports and exercise use by staff and students to start changing lifestyles in Fiji.

We have 20,000 students, so I have done the calculation that over the next 10 years, we will probably graduate 70,000 people. Now, those 70,000 people have been able to change their lifestyle when they get into their 30s and 40s. If they continue to play recreational sports and exercise regularly, you are making a real impact on the way that the society evolves.

Similarly, in 2017, we agreed that every year our medical college and nursing college would do or offer free health screening for our 2,500 staff, so we do medical screening for all the main things like BMI, blood pressure, blood sugar, prostate checks for men, breast cancer checks for women. Now, that is 2,500 people that are getting free annual medical check-ups. Again, what we are thinking is providing some kind of leadership and something that Parliament actually did for us.

We have adopted the Ministry of Health guidelines for the food we serve. So, just as you have here, when we provide food in the University, we are providing healthy food, high fibre food, vegetables to try to kind of change the people's lifestyle, so, it is that kind of way which I think it is important that as a National University, we actually take a leadership role rather than lagging behind. So, do you want me to stop after each one?

DEPUTY CHAIRPERSON.- Sorry, as you finish, you can move on to the next question. Thank you.

PROF. N. HEALEY.- The second question is quite a big one: What are the challenges that we face as a University? The first slide, I think, reflects the challenges that we face because many parts of the University were essentially Technical Vocational Education and Training (TVET) Colleges, teaching diplomas and certificates. They are now part of a University for the last 9 years, where about more than half the provision is at the higher education level and our provision is growing.

So in the staffing area, we face challenges of what we call "academically qualified staff". According to very sensible guidelines by the Fiji Higher Education Commission, in order to teach on an Academic Programme, you must hold a qualification at one level above. So, if you want to teach on a Bachelors Programme, you must hold at least a Postgraduate Diploma. If you want to teach on a Postgraduate Diploma, you must hold a Masters, if you want to teach on the Masters, you must hold a PhD.

Many of our staff are not qualified to the high levels and so we have been relied on as the University grew, hiring expatriate staff, PhD qualified expatriate staff to support some of the higher education programmes, clearly a big challenge for us is to increase the number of Fijian staff holding the higher qualifications, particularly the PhDs. So what we have done is, we have set up an International Office in 2017, and its job is basically to find people for overseas scholarships, so that they can go out to do PhDs overseas. We have got probably 30 or 40 staff now doing PhDs overseas: in China, India, Taiwan, Australia, New Zealand, and they are supported by various International Scholarships.

But, what is important is to drive, upgrade the pool of highly qualified staff here in Fiji and we are also supporting staff part-time to upgrade qualifications. So we have a number of staffs doing PhDs in our own University and doing PhDs locally at USP. So that is a big challenge for us. It is the same challenge that the United States, UK, Australia and New Zealand faced 25 years ago when they all began to expand their Higher Education Systems. So you may know the British System, half of the institutions in Britain, the so-called polytechnics are delivering technical qualifications. They were upgraded to Universities in 1992. The same thing happened in the United States and it happened in Australia, so we are on the same kind of trajectory which is about 20 years later.

Expatriate staff: We have about 100 expatriate staff, probably about 10 percent of our workforce. The challenge here is the retention because these staff are on three-year contracts and under the Immigration legislation, the jobs need to be re-advertised every three years to test that there is not a local candidate who is better-qualified, which is entirely reasonable, but it is a challenge for us in the sense that if you have got a three-year contract, you will start looking for a job towards the end of your second year. You are not going to wait until your final year because the lead time is very significant.

For us to get an expatriate member staff, it simply takes six months from offer to them starting work. So if they are going to go somewhere else, if they are going to go to Australia or New Zealand, they are going to start looking a year before their contract expires and if they get something quickly they will go. So, why is that a problem? It is a problem because most of what we do in a university has a very long time horizon. If you supervise a PhD student part-time a minimum of five years before that student graduates, if you supervise and leave after 2½ years, you are stuck.

Similarly, if I think about programme development, the engineering degrees, we launched a new Bachelor of Engineering Honours Programme in 2018, that one graduate its first cohort till the end of 2021. We will then seek accreditation for Washington Accord in 2022, this is the first year, we can do it. Now, the staff who developed that programme in 2017, that is two contracts away, if they go, we are in trouble because the team that comes into the accreditation, they cannot find anyone who actually knows and designed the programme. So, I think, that is a difficulty for us and we do try to work closely with Immigration to try and minimise this risk. As I have mentioned before about the importance of upgrading teaching, particularly for TVET, students are very different now than they were.

Some of our older staff are used to coming into a classroom, writing on a blackboard, the students copying it down and then regurgitating what they have written down in a test or an exam. Students do not behave like that anymore. If you teach like that, no one will come to your class. Any information you give them, the students can get quicker on their phone or their laptop. So, the way you teach is fundamentally different now. It is very much student-centred, all the materials are on something called 'moodle' which is an online learning platform. The contact time is spent much more with students, working with students to get them to solve problems. That is very challenging for all the staff who used to just being standing up talking and being respected. So, we are funding a lot of part-time study for our staff to get teaching qualifications and that is particularly in the TVET area where they do not have any formal teaching qualifications.



Many of the higher education staff like me will have teaching qualification as well but they perceive they often do not, so I think we have got about 70 staff or 80 staff of our TVET staff doing the first year of Bachelor Programme in TVET Education and that is important and it is very gratifying. They are doing these programmes and they are applying what they are learning in the classroom and they are all reporting that teaching is much more enjoyable that they are getting much more attraction with the students.

The final area of staffing challenge is in terms of skilled support staff. We are currently installing a new student management information system throughout the university. It is a \$20 million project. It is very difficult to get network analysts and IT specialists in Fiji. Our response, we have to use in some areas, make full payments because, maybe let us say that a member or a staff is on a certain grade and that grade reflects the duties that someone already have but they are in a technically skilled shortage area so we have to pay a bit more money to attract and retain.

So, those challenges are big. We are rising to them and really most of the universities are people. That is mostly what universities are about. One of the most famous universities in the world is to learn in the school of economics. It has got one of the worst states you have ever seen. If you went to London School of Economics and walk around there, you will think, "My gosh, this is worse than Nasinu", it is awful, fall into pieces. It has got some of the smartest people in the world. That is what makes a university - the people, so we have got to get the right people, attract and retain the right people.

Secondly, the resources are important. You probably have seen in the media that there is a bit of pressure on our residential accommodation at the moment, but that is because it is a combination of two factors. We have only about 2,000 beds and we have nearly 20,000 students. So it means that only that 10 percent of the students can be accommodated.

A lot of students do live in the Nausori-Suva corridor but we get students from all over Fiji coming to our Campuses and they need residential accommodation. So, we have actually made things worse for ourselves at the moment because we are upgrading all our halls of residence, all our hostels, and we are upgrading them on a rolling basis to minimise the impact. But if you have, let us say, a hostel that has got perhaps eight (8) residential blocks like it has in Tamavua, we might be doing one block every two months. But it means that block is out of commission so instead of having eight blocks, you have only got seven at any one time which is putting a bit more pressure on the accommodation.

We have got quite a lot of land so we are looking at where we could build that additional hostels. We are going to need hostels in Labasa, but we really could do in all our sites, additional accommodation. So we have been exploring with Investment Fiji and Fiji Development Bank for possible Public Private Partnerships.

These are kind of where you would work with a private sector partner, who would come in, ideally build and operate the facility on our land and then after 30 years, the buildings would revert to the University. That is a very common model in other countries and it is one that would allow us to get quite a significant increase in accommodation without taking the debt. So we know the new building that is going on at USP come as a significant debt associated with that and we are currently debt-free as a university. We have no debt and I think our accounts would like to keep it that way.

We have done a Campus Master Plan. We have currently planned about \$500 million of capital bill over the next 10 years. To fulfil that master plan, we do not have \$500 million so we are going to need to phase this over time and obviously work with Government where some of these buildings have a national priority, like the Labasa and the Koronivia Animal Hospital that is Government-funded.

The final one is financial sustainability. One of the things that is overdue is that, we have not reviewed tuition fees for some years. The consequence of that is that, we are increasingly dependent on our operating grant from Government. So the operating grant as a share of our revenue, is much higher for us than USP because USP has been revising their fees each year and they are quite a lot more expensive than us.

We think that we need to begin a tuition fee review and to undertake that, just to try and rebalance it a little bit because otherwise, we are just constantly seeing the tuition fee decline in real terms. But we understand that needs to be done sensitively because students are funding this through the loans from TELS in the main. So that is what our Senior Management group think are the key challenges for us.

Your third question was; how do we ensure gender equity in terms of recruitment, training, hiring and promotion? Our HR policies are in line with the Constitution, explicitly non-discriminatory. So the Constitution forbids discrimination on grounds of gender, sexuality, religion, ethnicity, colour and so we follow that to the letter. I have just had an interesting exchange with a number of our staff.

One of the things I explained to staff is that, although our policies are strictly non-discriminatory, the fact is that some groups are more drawn to some occupations than others. The obvious example is nursing which is predominantly female; teaching, particularly primary teaching is predominantly female; some of the professions, like accounting and Human Resources (HR) tend to be more attractive to Indo-Fijian; some of the practical subjects tend to be more attractive to iTaukei; so if you have got a non-discriminatory policy, what that means is that your workforce or your student base will reflect the choices that people made earlier on. Do you see what I am getting at?

There are areas in which we think that the imbalance is probably wrong, so we do not have enough women going into engineering, for example. What we have done, we have got a very well-developed Staff Development Policy and we are working with our staff to upgrade their skills and qualifications to move them on. I will give you an example.

In my office, I have got three staff. When the new Management Information System is up and running, I will need only one because all of those transactional things will disappear. All three of those staff members are upgrading their qualifications; two are doing Masters Degree and one is doing a Bachelor Degree. I have sat down and spend some time with them saying, "Where do you want your career to go?" Two of them want to be Human Resources (HR) professionals. We have been deliberately upgrading their skills so they can move out of those more transactional jobs and into a higher value-added HR positions.

We are trying to use that deliberately to kind of move people up and they are all women. One of them has already moved into an HR professional role. My Personal Assistant is no longer my PA, she is now an HR professional. I think that is positive.

We have a programme to promote women in leadership and is funded by the Association of Commonwealth Universities and run by a couple of very powerful women in the University. That is really to kind of empower women to support them. Some of the most senior people; our Pro Vice-Chancellor is a woman, one of our Deans is a woman, our Director is a woman; so we have got role models to try to encourage greater gender balance.

We are part of a project that has been run by the Women University Graduates; they are running a big project on getting more girls into science and engineering. So a lot of this is about, I think, pulling, pushing, supporting people to go through, so that they get the jobs on merit. But you tend to correct that and you are creating role models for people so that young women can look and say, "here are senior

powerful women who are well qualified in senior positions that I can inspire to.” That is a serious issue for us, and universities and meritocracies they are all about empowerment and opportunity.

In line with the Sustainable Development Goals (SDGs), there are a number of these SDGs that we directly align to. Obviously, SDG 4 - quality education is key, but as I have said in the start, we are trying to align our teaching and research to national priorities and a number of these SDGs are directly relevant here in Fiji.

The ones where there is the greatest alignment - the hunger, food security is an important issue. We are importing a lot of our basic food stuff - rice, things that we could be more than self-sufficient in, and so in our Agriculture College, they are very much focussed on food security.

One of the areas that we are looking at is also seed banks. If Fiji were hit by *TC Winston* which was generalised, we saw the impact on kava prices after *TC Winston*. But if more of the agriculture was devastated, we would need to fall back on seed banks to replant.

But I think there are a number of ways in which we can see, I mean, dairy, for example. If we had dairy yields at New Zealand levels, we would be a net exporter of milk, with the current dairy herds. But our yields are a fraction of New Zealand.

It does not make a lot of sense because the moisture content in the grass in the East of Fiji, the East of Vanualevu is much higher than New Zealand. I mean, most of the dairy in New Zealand are on the South Island, and we have to irrigate. So if you drive up and down the East Coast of the South Island where all the cows are, all you see are irrigation towers. We get it for free, just drops out of the sky. So we have done a lot of this work and I think, the Veterinary Science will begin to address some of this. I mean, TB in the dairy herds is a problem.

Good health and well-being, one of our central research themes is combating the security of NCDs.

Quality Education is our core business, as I said, graduate employability is a critical test here.

Gender equality, that is the core value and we just talked about that.

Affordable and clean energy, the other one, that goes alongside food security is energy security. The demand for electricity in Fiji is growing very rapidly. Our core is renewable, but it is the hydro. There is a huge scope to expand solar and so we are investing in developing our capacity to lead training for the solar industry in terms of installation and maintenance.

We also said about taking a national leadership role. We are planning to install solar in our Western Campuses. That will make those all self-sufficient, and that would be Namaka in Nadi, Natabua in Lautoka and Ba. Those plans have already been done and we have been in consultation with JICA. JICA have had those plans independently reviewed by a solar expert and we will be going to the next phase, calling for expressions of interest for that work.

The payback period on this is very short, I think, it is about seven years. So you are self-sufficient and in seven years you have paid for the installation, and it has a 15 year to 20 year life.

Decent work and economic growth, again, is our core business because our goal is to provide programmes that lead to good jobs, graduate employability. So all our programmes are designed with employers, they have work-based attachments and we do surveys with our students to see where they go



on graduation, but we are working with the Fiji Customs and Revenue Service to actually do a much more detailed regular survey of graduates' employment.

Climate change, climate action, is a central research theme and we have several new Masters Degrees but there is an Interdisciplinary Masters Degree in Climate Change Adaption, and that is part of a Global Network funded by the Association of Commonwealth Universities and some of you may when the Duke and Duchess of Sussex were here. In the speech at USP, the Duke of Sussex, Prince Harry announced scholarships for this programme - Queen Elizabeth Scholarship Programme and partnership for the goals. We work with a very large range of international partners to make our goals work mainly universities in Australia and New Zealand but also the Association of Commonwealth Universities, we are working quite closely with Caribbean Universities and more widely in the Asia-Pacific.

Question 5 was future plans. One of the slight drawbacks of talking about the Annual Report 2017 is that an annual report is already 13 months old. So, a lot of what was in the future when that book was written is now in the past, if you know what I mean. There is an awful lot that was done last year in curriculum development. Bigger upgrades in the digital infrastructure.

We did connect to our net last Easter to get this very fast broadband speeds, In the Budget we were allocated funding to help through *Walesi* and Digital Fiji initiative to have free unlimited *Wi-Fi* for students anywhere on campus. So those routers have been installed all across our campuses so you can sit in the *bure* or under a tree, anywhere on our campuses and get Digital Fiji (*Wi-Fi*).

So for students, they are not using any of their own data when they are on the campus. When they are in our buildings, all our buildings have *Wi-Fi* but when they are outside, they use Digital Fiji Network.

We have moved a long way on the physical infrastructure, so a lot of projects have now, some have been completed, some are underway. Last year we reviewed and made a lot of changes in our HR Policies to improve the quality of working life for our staff.

The future plans, right now we are well underway with the Management Information System. This will basically move all our processes online. Our students will enrol online, check their grades online, graduate online and there will not be any paper based activity at all. Similarly, staff will manage their leave balances, sick leave and everything will be done in an online environment. That will massively increase the efficiency of the university. A lot of our systems are still paper based, even where they are currently online, we are using old legacy systems that do not talk to each other. This new system, everything is integrated such as HR, Finance, Student Management, Asset Management; it is all on the same system. So there is nothing you cannot do with the system, at the moment everyone has got the Asset Management Plan is on an Excel spreadsheet, in States and Facilities, there are three different Student Management Systems from the date when they were separate colleges that do not talk to each other. If I want to ask the question, how many students have enrolled today, I will not know until tomorrow because they have to go and get downloads from the three different systems manually and enter them into an Excel spreadsheet, add them all up and then tell me, it takes them about 12 hours.

We will have instant information. The Campus Master Plan is already set so we are planning major investment in new buildings and consolidation of campuses. We have got too many campuses, too many small buildings and it is very inefficient. So we are going to try and reduce the number slightly. Here in Suva we have six major campuses.

We have Koronivia, which is our Agriculture Campus, we have Nasinu which is Business, we have got Tamavua which is Nursing, Pasifika which is the Medical School, Derrick which is Engineering and Fiji Maritime Academy down on the coast, but we have also got Nabua (a small site there), Narere

we have got National Training and Productivity Centre (NTPC), Nasese we have got a small restaurant just next to the Police College. These small sites are really inefficient. It makes no sense to have. If you want to have, for example, a training restaurant and kitchen why would you put it on the beach on its own where there is no one? Stick it on a major campus and you could actually have them feeding their own students. So, it is just a kind of historical legacy but the new plan is focussing on a smaller number of more intensively used campuses. Because we have invested so heavily in digital infrastructure, we want to use blended learning so that we can actually make education more accessible to people across Fiji and use the physical state more intensively.

So, the sort of example of that, that I gave is, if you wanted to study engineering but you live on a small island. With *Walesi* and the satellite technology in all the inhabited islands now are going to be connected, through the satellite, you have got fast broadband in smaller island, most remote island communities. Now, what you could do then is, we can offer an Engineering Degree by blended learning, so the students can study the content, take part in lecturers, discussion groups all virtually by video conferencing, for example, or by looking at the material online and then if we have got the right residential facilities in the semester breaks you bring the remote students in for very intensive laboratories or workshops. So, you could imagine then, you say for example, you live in a small island maritime community, you are now connected, you can study the material on line but you come to us for the hands on learning, but it is intensive. You come and live in, residential accommodation when regular students are away and you do four weeks of laboratory. So, you do a year's worth of laboratory in a 4-week period because you are doing it in 10 hours a day.

That is the kind of module we have got in mind. I think it is a game changer and it fits completely with the Government's plan to get a digitally connected nation. So, I am quite excited about that and I think that has got real potential. So we have hired two of the best digital technologists in the country, now work for us, they are converting our course system plan to be online. Unlike USP, we will never be distance learning. We have no ambition to be pure distance learning because we are a vocational university so all our programmes have a practical work base component. It is possible to deliver that by looking at a blended mode. I think over the next two or three years, we could start to really penetrate, support people in very remote communities to upgrade their qualifications and it is incredible what you can do with that technology now. So there is really a lot we have to look forward to.

Question 6 is a very fairly detailed question around plumbing. We offer plumbing at Certificate IV level. Most of the trades are at Certificate IV. This is done in a kind of mixed mode. So, when we say quarters, all our courses are semester based now, but the way our semesters work, you have seven weeks of classes, a week break, seven weeks of classes and then two weeks of assessment. So, we can break our semesters into two halves. So, for courses that are delivered more intensively we teach only half a semester.

So the plumbing course they do it in so-called quarters, they do half a semester and then some work experience, half a semester, some work experience and to become a plumber technically, that is known as a Waterworks Fitters Licence Holder. You need to have that Certificate IV or an equivalent from somewhere else. You need to have practical experience (4 years' experience) and then you need to pass the exam. Historically that exam has been set by FNU. It was awarded by the Department of Water and Sewerage. They set the exam in consultation with us, that responsibility from the start of this year moved to Water Authority of Fiji (WAF). So they have taken over licensing plumbers but we are currently working with them to get an Memorandum of Understanding (MOU) so that we get the same arrangement to moderate the exams as we had before. So, I think a fairly tried-and-tested model. I am not sure what lay behind the question. Was it a concern that there are not enough plumbers or ....

DEPUTY CHAIRPERSON.- I think one of our Honourable Members raised that in one of our forums. Probably we realised that there was a shortage of plumbers, I suppose.

PROF. N. HEALEY.- The root is there and as I said earlier on when we were talking about the balance and provision, we are working very hard to try to encourage students that these are very attractive career choices. For many of the professions, you will get a much better job and have more likelihood of setting up your own company than if you go into higher education. And you have only got to look across the ocean to Australia, in some of the states like Queensland, most young men want to go into the trade, they do not want to go to university because the trades are where all the money is. So we are with our marketing and our schools outreach, we are trying to encourage people that these roots to trade jobs lead to really satisfying careers and the opportunity. When you got a few years' experience to setup your own company and employ others, you are much less likely to do that if you become an accountant. You are probably just going to be sitting in an office for the next 20 years, kind of working out someone's books.

We found this with *TC Winston* that we did not have enough carpenters, there was a shortage of carpenters. The roots are all there, it is up to us starting to make them attractive and to communicate that to students. And I think when we get the data, when we get the results of the study that we are doing with Revenue and Customs, I suspect that is going to show that employment prospects for a lot of our TVET students are very good, they are getting into good jobs and they are well trained.

Number 7 was something that this Committee has talked about in the past: Are there sufficient staff to conduct training for captains? I spent a bit of time with the Fiji Maritime Academy (FMA), just making sure that we gave an informative answer here. When we used the term "captain" in a technical sense, I mean we do not mean the skipper of a small boat. In a technical sense, a Captain is a Master Class 1, so this means you are ship's master for a large ship that can do international travel.

So in maritime terms that is called a "Class 1". There are five classes going down to Class 5. Now the moment we educate, we train people in classes five, four, three, so they go from five up to one, one is the top. We have a relatively new (launched last year) Diploma Programme in Nautical Science and a Diploma Programme in Marine Engineering and the way these programmes are structured is, you can either take the two-year Diploma and then go to sea or you can take one semester, so you can do one semester for Class 5, go to sea, get sea experience, and then to actually get the Class 5 Certificate of Competency, you have to take an exam with MSAF (Maritime Safety Authority of Fiji). So, to be a qualified mariner, you need both the training and the sea time and then pass the exam.

So, you could do the theory for Class 5, go to sea, come back, do your Class 5 Certificate of Competency with MSAF, come back to school, do another semester theory for Class 4, go to sea, come back, get Class 4 licence, or you could do the whole two years then go to sea for one and a half years and come and get Class 3 certificate of competency. That would give you the right to be a skipper on a ship in coastal waters, sort of a restricted licence. We have now developed a Bachelor of Nautical Science which is a top-up for Classes 2 and 1. So, once a mariner has a Class 3 Certificate of Competency, they can come back to Fiji Maritime Academy (FMA) and study for one year, upgrade to a Bachelor of Nautical Science than go to sea, get the sea time and when you are at sea, you have to do a whole lot of designated tasks and when you come back, you can apply for a Class1 licence from MSAF, so you have to take the exam. That is how it works.

The Bachelor of Nautical Science was developed last year, it has been approved by the Senate. It needs to be accredited by MSAF. It is designed to meet the International Maritime Organisation requirements but MSAF is the accrediting body. So, they accredit the Bachelor of Nautical Science and say "Yes, this meets the standards for the technical training for Class 1 and Class 2. We will accept this plus the sea time so we will then allow you to come back and get a licence."



We think there are currently about 300 mariners in Fiji. They currently hold Class3 certificate of competence and therefore have very restrictive licences that would be eligible for this programme so that they could come back to the FMA and either one year full time or two years part-time could upgrade to the Bachelor of Nautical Science and get the Class 1 licence.

Do we have enough staff? Yes and No? We have got a group of very experienced master mariners with Class1 certificate of competency, so we have got highly qualified staff. Many of them have done the Masters of Maritime Engineering and Nautical Science in Malmo, Sweden, the International Maritime Organisation University but several of them have very experienced ships' captains but they do not need support in teaching at the bachelor level.

We have got plans to do that. They have got the experience and the technical knowledge but teaching at this advanced level can be a little more challenging for them. They are currently teaching only diploma level, so we will have to support them. The short answer is, yes, we have sufficient staff but they are going to need support. We have got the programmes ready to go, it is currently with MSAF where they are reviewing the material. We plan to start the Bachelor of Nautical Science in the second semester, that is in July. So this is quite a breakthrough, I mean, it is a game changer for the Fiji Maritime Academy (FMA) and it would have a significant impact on the maritime sector here if the mariners can get this level of training.

Question 8 is regarding academic portfolio review: Do we plan to do this exercise for the post-graduate programmes? We actually plan to do it every year for every programme so when we did this exercise the first time around, the data had to all be gathered manually and kind of assembled into spreadsheets.

With the new management information system, we will have all this data stored, being refreshed constantly in the system and so last year, we appointed a new Pro Vice-Chancellor, Learning and Teaching; a very, very experienced academic from Hong Kong who was the PVC Learning and Teaching in one of the Hong Kong universities. He is currently going through our Quality Assurance Process to embed this, so it is an annual exercise. Every year, you do the exercise and every year, you are making incremental changes in all your programmes, so it is a standard. This academic portfolio review was difficult for us to do the first time around but the actual framework we took from the UK where it is done every year for every programme, and it is just a standard system for monitoring and continuous quality improvement.

The final question is one that is, I think, a frustration for both this Committee and for us. We are gradually getting there and we have an experienced lawyer and a couple of para-legals working on this most of the time. This is when the FNU Act was passed, all the properties that were then occupied by the colleges, the titles were to be vested in FNU.

Now when the university was formed, the titles to these properties were all held by the line Ministries to which the colleges belonged so the Ministry of Agriculture that held the College of Agriculture, Fisheries & Forestry (CAFF) property, the Ministry of Education holding Nasinu and the Ministry of Health held the Tamavua and the Pasifika. So this process has taken a long time so those mandated law (and the law is now 10 years old), this process is still in-train although the list is getting shorter and shorter, the ones that need to be resolved.

So I think, the total we have got there is 25 separate titles. We have got 13 full titles. We have four approval notices for Nasese, Labasa, Natabua, Nasinu and an application approved for a new lease for Legalega. So those are all very far advanced.

Transfers are in process for another four: Koronivia, Tamavua, The School of Nursing, Pacifika, I apologise for the spelling. I have gone with the Maori spelling rather than the Fiji spelling, I am afraid. Sorry, that was a sort of Freudian slip.

There are three properties that were built for us and that we used but are still registered with the Ministry of Health and the Lands Department. Those are actually titles held by the Lands Department and so we are in discussion with the Lands Department for the transfer. I think at the last meeting of this Committee, I actually presented the flow chart that shows all the steps to transfer a title from one entity to another and there is a lot, and most, I think, nearly all of these we had to survey because we did not have accurate surveys, so we have actually had to do the surveys for all of these. I hope that the next time I am sitting before you, we will spend less time and even shorter, we will gradually eliminate the unfinished business, but we are tracking this. Our Council has been demanding reports at every meeting, so we kept going on it, so I think that is the full set of questions, and I am happy to take questions on anything else if I have not answered fully.

DEPUTY CHAIRPERSON.- Thank you, Professor Healey, for very detailed answers to the questions that were posed. However, if our Members have follow-up questions I am asking them if they can put them forward to you. Honourable Salote Radrodro.

HON. S.V. RADRODRO.- Thank you, Deputy Chair, and thank you, Professor Healey, for your very well-presented Report to us this afternoon. My question is on the College of Medicine. I think it was last week when the Ministry of Health made a presentation to Members of Parliament and they highlighted that one of their biggest challenges was on the shortage of doctors.

From my memory, if I am correct (because I used to be a career civil servant and I had a stint with the Ministry of Health), Fiji is right now sitting at a time when there is a huge gap in terms of our doctors demand and we are recruiting a lot of expatriates.

What plans are there in place by the College, through FNU, to be able to effectively address this demand on having to address the shortage of doctors, particularly those specialised in different fields. These also include nurses, for example, when the Makoi Maternity Unit was fully rebuilt to cater for the Nasinu-Nausori corridor and the high demand at the birthing unit at Colonial War Memorial (CWM) Hospital, after Makoi was completed, it was not functioning because of the shortage of midwives; again the specialised nurses, so what plans are there in place to be able to address this human resource demand in the Ministry of Health?

PROFESSOR N. HEALEY.- Thank you for that question. We have spent a long time working with the stakeholders in the medical sector to try to ensure that we are balancing supply and demand. I think the issue is not so much the shortage of supply of new doctors, that is not an issue. If we think of how we make doctors, the doctors go to university for six years to do their MBBS; it is a six-year programme. Once they complete the programme, in some countries, it is called residency, in other countries, it is called an internship. In our case, they join the public health system and then they rotate you through the main disciplines, so they will spend a year or possibly two years, sometimes working their way around in paediatrics, oncology, et cetera. Often that means, they have to work at different hospitals because they are different specialisms.

There are roughly 70 places available in the Public Healthcare System for interns at the moment. Once they pass the internship, you have got a newly minted doctor, then you have a doctor. If you think about the numbers, we have a target as a nation to have 900 doctors, that is, one per thousand the population.

When this exercise started in 2017, we had about 630. I think we have about 800 now, we have hired quite a lot of doctors. The gap between the target number (the number we want) is not actually that big, relative to the number of slots there are available for internships. We are closing the gap quite quickly, I think, it is the second part of your question, but I think what they are probably concerned about is the specialism. So once doctors have qualified and become registrars, they then need to specialise. They do quite extended training for Masters Qualification, typically four years, where they then specialise and become consultants.

I think the shortages in Fiji is at the consultant level, not at the level of the more junior doctors. I might be wrong about that, if my date is out of date, if the information I am using is slightly outdated, but it was quite recently we looked at this.

In the Medical School or CMNHS, we now have probably 70 percent of our programmes is Post-Graduate. We have got a very, very good MBBS Programme that has been there for a long time. It is state-of-the art problem-based learning, clinical attachments, built in from very early stage, but it is in the Post-Graduate specialisms that we have been focussing our effort, usually in partnership with Colleges of Medicine overseas. So, for example, we have a Masters of Emergency Medicine. That is done in consultation or in close collaboration with the Australasian College of Emergency Medicine. These are the consultants who work in the Emergency Room, our Accidents and Emergency.

So we are educating people now, a very wide range, of specialisms. I saw the list I was Chairing Senate this morning, and we reviewed the CMNHS list. They are now Masters specialisations in every recognised area.

Many of these are the only provision in the Pacific. I think last year, we launched a Masters of Oral Surgery. There were no oral surgeons anywhere in the Pacific. So if you were in a car crash and you smashed your jaw, you either have it set and you be disabled for life or you would have to go to Australia and New Zealand for reconstructive surgery.

We have a Clinician, who is PhD trained in Japan, Oral Surgeon, and he launched the Masters of Oral Surgery. This programme typically only have maybe three students, because we do not need very many of each colour or of each flavour. You need a couple of years and another couple of years, with a population of just under a million. If you wanted to have a neurosurgeon, probably only scope for one, but we have worked very closely with the Public Healthcare System to ensure that we have got a Masters provision now in all of the recognised areas.

In many cases, we are not delivering most of it. We bring in people from Australia or New Zealand to teach some of these provisions because it may be, in some cases, I mean, with emergency medicine, we did not have any consultant in Emergency Medicine in Fiji. So, when we started the Masters Programme, it was all taught by the Australasian College of Emergency Medicine. We have got a Professor now in Emergency Medicine, who is now teaching on that Programme himself. He is a graduate from that Programme. So that is the way we have been going.

Similarly, in nursing, one of the areas is the nurse practitioners which is a kind of Post-Graduate specialisation that allows in more rural communities or maritime communities advanced nurses who have the ability to prescribe drugs. So we are working very closely in partnership with the Ministry to try to ensure that we meet the scarcity that the manpower probably needs.

One of the challenges in nursing as opposed to medicine is that nursing is one of those professions that still remains a strong gender imbalance. It is predominantly women. In almost every country I know



one of the challenges with nursing is not so much the production of new nurses, it is the fact that you lose nurses when they start having families.

One of the things that I think we may need to look at is and I have this Programme with other universities I have worked at, is actually programmes that reskill our former nurses so that they can re-enter the profession. So if you got someone who may be took a 10-year career break to raise children but once they return to the profession in their 40s, you can then re-skill them. So they call women returners and it is a big potential source of labour because in most countries certainly in the United Kingdom (UK), if you look at the statistics, there are probably more trained nurses who are not nurses than practicing nurses. Do you see what I mean?

You have got people who have actually been educated as nurses and they did five or ten years but they then stepped away from it when they had a family and did not go back to it because the hours are very demanding, the shift work is challenging, so I think one of the challenges there. I am not an expert in this field but I take all my information while working with the Deans.

DEPUTY CHAIRPERSON.- Thank you, Sir, for that. Are there any other questions, Honourable Members? Honourable Alipate Nagata?

HON. A.T. NAGATA.- Thank you, Deputy Chairperson, and thank you Professor Healey. Apart from your Apprenticeship Training Scheme, is FNU assisting its prospective graduates in other fields of studies to find jobs? For instance in Papua New Guinea before we graduated in our final year, we had business houses coming to the University to conduct interviews. Do you have some sort of those arrangements in place?

PROF. N. HEALEY.- Yes, we do. In all of our campuses in the route to graduation there are career expos. We have large career expos, there was one in the Western Division which we have asked the people in from the other Campuses in the Western Division, in Central and in Northern Division, and we will have all the major employers coming in and setting up booths, really promoting the job opportunities in their companies or organisations. Also, they are doing provisional interviews for students so they can see who they can look over and call them for more formal interviews.

We have a career service that will provide support to students to write CVs, do mock interviews and learn how to present themselves. We have got quite a well-developed service to support students get into jobs.

But one of the special features at FNU is that, all our programmes require students to do workplace attachments. So many students will get jobs in companies or organisations they do the attachment. These attachments are often six months, so if you have spent six months with an employer and they like you, they would like to keep you because it is like a trial before you buy a scheme, they are getting you for free and seeing how you work and you fit in so we have got a very strong focus on employability.

The moment we survey all our students at graduation and when we do the April graduation, the students have finished their Degrees or Diplomas in November/December time, so this is about four months after they have graduated, those typically show 80 percent to 90 percent of them are employed. So, it is pretty high, but we want this data from Fiji Revenue and Customs Services to really drill down into that and see exactly where they are employed, how much they have been paid, so we know exactly how well they are doing. So, that helps. I think we are do a pretty good job. Could we do better? I am sure we could, but we certainly have that goal or service in place.

DEPUTY CHAIRPERSON.- Thank you. Honourable Ratu Lalabalavu.

HON. DR. RATU A.R. LALABALAVU.- Thank you, Deputy Chair and Professor Healey. It is not a question, it is more of the observation and a comment. You mentioned in your Annual Report in 2017 that the TVET enrolment has gone down from 2016 to 2017 and much of the reason is because of the shift with regards to students preferring more high education because of the economic development, et cetera.

I have reservation on reasons why that is being said because of the decrease because, Professor Healey, in my community I have youth or elders with skilled workers and are not qualified. If you mean qualified in the sense of a Certificate or Diploma, but they are very skilled workers and some of those skills have been passed down by knowledge from hands-on activity. They have built houses that have withstood *TC Winston*. Some have built houses that were unlucky. Structures that had been built by qualified people were also destroyed by *TC Winston*.

What I am trying to say here, I am sure if I have heard you right, that you are trying to move into the rural community - the grassroots level in terms of training. The Ministry of Youth and Sports presented to us last week and I am aware of this activity called Mobile Learning Clinic whereby I am sure if it is conjunction with FNU, but they come down to villages, rural areas and conduct their trainings in various trade skills - fibreglass, basic carpentry, housekeeping, et cetera. The response was overwhelming.

It will be interesting if a study was done to see students who are attending TVET Programmes and the study could indicate their social background. One of the main reasons (and I am talking from experience) because students do not come in to complete or enrol at all is because of the accommodation issue. In your case, you have mentioned that you are running out of spaces for accommodation.

I like what the Ministry of Youth and Sports Mobile Programme is doing and if that is incorporated into the FNU Programme, well and good and TVET Programmes are trade skill and ever demanding skills. Look around you, with the development projects and the high-rise buildings going on now, then probably they will only work in one and skills demand overseas is very demanding and probably they will only work in one and the skill demand in overseas is very demanding. So, with FNU continuing to provide technical training, in my view I will recommend that, but if it is in the programme or if it is in FNUs Plan, can they take it further down? Because if we do a study to see the people coming in to do these programmes, we will see some of them have socio-economic issues with regards to accommodation, that will be one of the reason why most are not coming up or enrolling in TVET courses. Thank you.

PROF. N. HEALEY.- Very brief response. Really with some of the training that is being done by Youth and Sports, FNU has a kind of parallel programme called the, "Sustainable Livelihood Project" which is separately funded from the education funding stream. That does something similar. We send trainers into maritime villages and rural villages, they typically live in the village for two weeks and they provide hands-on training in a range of areas and that is very well received by the people. But it is really intended to enable people to become more self-sufficient. So they do, for example, maintenance repair of small boat engines, outboard motors so that they can ship an outboard motor, service it and repair it or they might do a course in constructing a bread oven. The fibre glass one you talked about repair, so, those communities can become more self-sufficient. I think what I was sort of touching on is that a lot of the areas that FNU offers in the TVET space are areas where to do those roles increasingly requires quite sophisticated machinery and equipment.

If you want to be an automobile mechanic in the 21st Century, when I was a kid and had a motorcycle, I used to service the motorcycle but they had points, maybe you are all too young to remember points. They had these points that were electronic system and you set the point using a cigarette paper. Now you just plug it into the computer and the computer runs a diagnostic and tells you how to fix it. I had a motorcycle and the ABS system broke and there was no one in Fiji that could repair it, because no one had the BMW computer that could analyse the problem; I had to ship it to New Zealand to have it repaired.

So, what I am getting at is, a lot of the TVET training we do is using increasingly sophisticated equipment and it requires the students use that in a kind of hands-on way. What we are trying to do with the blended learning is say, “look, we could provide some of the background teaching in a kind of virtual environment” and then bring the students into our accommodation, so they do not have an accommodation problem. Bring them in for let us say 3 or 4 weeks, with intensive hands-on experience so they could then get the qualifications. It would be worth their while coming in from a remote island for a period where they could then get an international qualification.

The other thing that is worth saying is, operating in the Pacific is something called, “the Australian Pacific Training Coalition (APTC)”, used to be called “Training College”. They are in the third phase of their funding stream now and that third phase is really what I think of it is a legacy phase. They are trying to make sure that when they finish that project in 8 years, they leave behind a legacy in the Pacific of high quality TVET training.

We have got a long term partnership with APTC. We are working with them to basically shift all of their TVET operations out of Vatuwaqa and I think they have got something at Walu Bay onto our campus at Derrick so that we have a joint facilities and we then are providing FNU qualifications that have got Australian accreditation; that is the end goal. We are doing that in a range of areas; automotive, diesel, refrigeration, air-conditioning, sheet metal working, et cetera. We think that if we can go with this blended road we can make that accessible to people who cannot possibly afford to come and live in Suva for a year to do a full-time Certificate or Diploma but could stay in their own communities and then just come for a period of few weeks. In times when our accommodation is vacant, because the thing with university accommodation, outside the semesters, there is no one in it. So, we can use the facilities more intensively if we teach in those holiday periods.

So, with the new semester system we have got a four-week break in the middle of the school year and then the students finish their exams in early November and do not come back until February. So, we have actually got a summer school period as well where people can come in and study. So, it is all trying to kind of build on, I think, the mobile approach which has huge value but it only allows you to kind of take out to those communities what you might call “intermediate technology”. You can take power, tools and things like that but you cannot move heavy equipment like computerised lays, et cetera. You need to learn how to use those on the site. So, I think we are on the same wavelength there, we recognise those communities who need access to tertiary education whether TVET or higher education, just trying to find ways to do that.

DEPUTY CHAIRPERSON.- Thank you for that, Sir. I think a lot of community awareness is needed to bring people on board so they can embrace the programmes that you have. The idea is tremendous, we have to go down to the people and get them interested, once they are there, we grab them and we can bring them into that programme as the Honourable Ratu Atonio Lalabalavu has mentioned. I support that idea where we move out and work in the community and empower them. Thank you. Any questions from the Honourable Members?



HON. V. PRAKASH.- Mr. Chairman, if you allow, I have three questions. Thank you very much, Vice Chancellor for the reforms that you have taken during your short stay with FNU, we commend that. I am also very pleased with your new construction project where you are planning to have a sports complex at Nasinu, which has enough space and it is a very ideal place for such a development that you are undertaking.

Apart from what you have explained, we understand that under your curriculum the teachers in Lautoka have got PEMAC education as part of teacher training which they are doing. In secondary schools, especially, there is hardly any PEMAC training. Sir, it is important that these PEMAC teachers are trained. Previously they have done quite a wonderful job for Fiji in sports. Few sports in Fiji has put Fiji on the global arena especially rugby, there are other sports which are dying and when we compete as a nation in Commonwealth Games and Olympic Games, there are many sports that we can compete in.

Do you have plan to establish a school of sports in the near future where such sports which are dying out can be trained and also those sports which are very common, they have a specialist and their school can train specialists who can train other sports and be competitive in the world arena. I know Nasinu very well. I have been a teacher there for nine years. It has big space where this school, apart from the School of Business can be. I just want to know whether you have a plan to establish school for sports under your university or it will be just up to Physical Education, Music, Arts and Craft (PEMAC) level?

PROF. N. HEALEY.- We do already offer Sports Science as a discipline within the university. Often for teachers who would want to take that as a specialism or people who want to go on to be personal trainers and so on. I think that there is going to be a big growth industry in Fiji of commercial gymnasias. You have already got quite a number springing up and it is a big growth sector in many countries now. That is something we are already involved with.

With the new gymnasium that we have got, the primary purpose as I said before is to change lifestyles. So we want it to be democratic in the sense that we want to kind of offer exercise classes and sports for everyone to change people's behaviour, but it will provide facilities that can be used by more elite athletes in terms of being able to train. We have got a specialist former coach of the Fiji Seven's team who is our sports advisor, Alifereti Cawanibuka. He has been working very closely with the design of the gymnasium and it is something we are very committed to this.

If you go to the Coca-Cola Games, you see the vibrancy of that whole area, I live near Sports City Complex and Sports City Complex during the Coca-Cola Games is just like being on another planet, is it not? The level of enthusiasm and excitement is just tangible. We are trying to move that up to the tertiary level.

We have been expanding our inter-campus sports tournaments so that we have more organised sports taking place at campus level. We have been investing pretty heavily in the Fiji University Sports Association (FUSA Games) which is the university equivalent of the Coca-Cola Games although it is typically, the FUSA Games is team-based sports rather than individual track and field athletics. But we are looking to grow that. I do not know if you are aware of this, there this is one in September each year. It takes place in the ANZ Stadium and we have 20 different events. A lot of them are rugby, I have to say all those, we have got men's and women's 7's, 15's and Touch so that gives us six sports straight off the bat. But I am delighted to say, FNU now dominates the FUSA Games. We have won it the last two years out of three, much to USP's disgust. But I think that is an area that we would like to grow.

Elite sports is at the edge of the drive for wellness but I think with the great advantage of it, where it fits, is that elite sports often inspire the recreational sports. I used to be a long distance runner and I would never win anything in a 100 years. Well, I would have if everyone else went, let me run for a 100

years, I might win. When I was running for probably 20 years, I was inspired by the middle and long distance runners that I watched in the Olympic Games and Commonwealth Games. It trickles down if you see. There is a reason why all the kids play Sevens rugby, Touch rugby and it is because our Fiji Sevens Team is so brilliant; 38-nil. That was not a game, was it? It was a hiding. So, I had to be pulled off the ceiling after the final whistle, it was so exciting. The reason we would want to support the elite athletes or high quality tournaments is because it actually lifts the quality of everything else. That is something we spend a lot of time in the planning for that gymnasium to make sure it can be used for national and international sports.

HON. V. PRAKASH.- I am sorry, Professor, my other question is regarding the School of Agriculture, especially in the area of training of para-veterinarians. We know very well that Fiji has been experiencing diseases in the dairy industry which is brucellosis and tuberculosis. For some time, we did not have enough para-veterinarians, but we are glad that this Government has introduced and we are having para-veterinarians. Do you have any other programme for these para-veterinarians to upgrade their studies in Fiji up to Bachelors level rather than just up to Diploma level. The reason being that is the area we have seen quite a growth in Fiji, not only in dairy but we have got chicken, sheep, goats and other animals that are needed to grow in these tropical climatic conditions so that we are self-sufficient.

One of the reasons why we could not have those growths is, we do not have those specialised-trained people from the Fiji College of Agriculture. We do have para-veterinarians but are you having any programme to upgrade their studies to another level?

PROFESSOR N. HEALEY.- Thank you for that question. As a result of the review and the change to semesters, we worked closely with the Fiji Veterinary Association to re-design our veterinary science programme. That is now, I suppose, a sort of a tiered programme where you can leave at different levels. The programmes in basically Veterinary Science and Animal Husbandry, you can exit with a Diploma which would qualify you as a para-veterinarian effectively, what we call in other countries as veterinary nurse. You can complete the degree which is Veterinary and Animal Husbandry, but you could do most things but you could not, unlike a veterinarian, prescribe drugs, et cetera, and then you can do the full 6-year programme or 5½-year programme to qualify as a Veterinarian.

It is something like a pyramid, more students will exit at the lower levels or the diploma level and Bachelor of Animal Husbandry level and then only the kind of top students will go to full veterinary. That is because in conversation when we were doing all the consultations, it became pretty clear that you needed to have a balanced and integrated training system. You cannot have a system that only has para-veterinary and you cannot have a system that only has veterinary. This is parallel with the medical system; for every doctor you need several nurses. The doctors perform the surgery and do the highly specialised work but a lot of the treatment is managed in the recovery for which you need nurses operating in a different way.

We have worked very closely with the Ministry of Agriculture and the Fiji Veterinary Association, we have got programmes now that meet the demands of the market. We will be graduating our first cohort of veterinaries this year. We have a shortage of veterinarians in Fiji. The last time I looked, we only had about 14 or 15 veterinarians in the country and two or three of them are in Biosecurity, some in the South Pacific Commission (SPC) but often they are just expatriates doing a year volunteering.

(In-audible)

MR. PROF N. HEALEY.- We have got veterinaries who are registered in Fiji, but they are trained overseas, I should have made that clear.

This cohort will be the first cohort of graduate veterinarians that are trained in Fiji, everybody else had to go overseas to get trained. That has been part of the problem, I think it has maintained the shortage because we have scholarship-funded Fijians to go to study in Sydney, in Queensland and New Zealand, often enough they have done their bonding period, they have gone, because the difference between what they can earn is so great, where as we think, if we have got people who are embedded in Fiji, they have learnt their profession here in Fiji and committed to the country, then we can keep them. I think, we have seen several examples with rooster poultry, their developments have been constrained by the shortage of veterinarians.

Grace Road operate a dairy farm, they had to bring in veterinarians from Korea to work at those problems because they had nobody locally that they could use to diagnose the cattle that were infected and so to decide whether the cow would treat. We are confident that there is a shortage, and this will be meeting a real need, but with this tiered programme, we can fine-tune if we see that the demand is starting to become fully satisfied, we can reduce the number of places we have got in the final couple of years of the programme so that we do not swamp the market.

There are various estimates, New Caledonia has 60 veterinarians and, I think less than 200,000 population so we did quite a bit of work looking at comparative nations to see what looked to be a sensible ratio, looking at agriculture in proportion to GDP, the population, the number of people working in Agriculture to try to gauge what we think the market would be in the long term. But, to some extent supply creates its own demand. If there are more veterinarians available, it is likely that more people go into animal farming, because there is an opportunity to make it profitable.

HON. V. PRAKASH.- Just a follow-up from Honourable Lalabalavu, the Technical Vocational Education Training (TVET) Programme is applauded. I think when it was introduced a few years back, the whole country was quite happy, for example, Plumbing Courses.

The type of development that is taking place in the country, with infrastructure and the buildings that are coming up, with multiple storeys, et cetera, we are wondering if those carpenters, plastermen and other specialists that undergo those training would be sufficient in years to come, that our country have those specialists who can be trained as plumbers for building up to 28 storeys, et cetera, and also the carpenters. What we hear is that, still, we get expatriate to come and supervise the work of such large buildings that are coming up. Like any country, Fiji will be developing and we will be going into a very big building development.

Do you have plans for extending this TVET Course to again higher level? And again those people who are already experienced but they do not have the qualification, can they start from somewhere to complete their professional training, so that they can replace those people whom we bring from overseas to do supervision? Do you have that programme in TVET?

MR. PROFESSOR N. HEALEY.- It is to ensure that our programmes are internationally-benchmarked, actually, that is across-the-board because one of the best ways of keeping pace with changes in the market and technology is to have some kind of international accreditation so that you will always be benchmarking on best practice globally. So that is why we are putting so much effort in the Engineering Programmes to get the Engineering Degrees: Washington Accord.

To get Washington Accord what we need to do is have our Degrees accredited by Engineers New Zealand which is one of the signatory countries to the Washington Accord. What that will mean is that our Engineers are trained the same standards as the Engineers in the United States (US), United Kingdom (UK), Australia and New Zealand and all the other 24-member countries and they can work anywhere in



those countries. Those Washington Accord standards are constantly being changed in response to developments in the market.

The same thing works at TVET level, it is called the Dublin Accord, so again, we have designed all our Diploma courses to meet the Dublin Accord requirements so that we can get the accreditation by Engineers New Zealand.

In the areas that are not covered by Engineers New Zealand, that is one of the reasons why we want to work with APTC because if we design the programmes in areas like Plumbing, Carpentry, Painting, Air-Conditioning to meet the Queensland TAFE standards : Jewel Awards, then we are ensuring that these are at world-class standards. The graduates are qualified to work anywhere in Australia and, of course, they are operating on these building codes, operating in much higher buildings, et cetera.

I think we are generally trying to make sure that all our programmes are constantly being set against the best standards, so that we keep up-to-date with the changes that you are talking about.

The challenge in Fiji is that, things are happening so fast that we are moving much, much more quickly than other countries, with Telecoms, I mean I am surrounded by other people's cell phones here but it was only in September 2016 that TFL launched 4G. Suddenly, we transformed the Telecom's market and everyone is walking around now with the Smartphone watching TV on their phones, et cetera. It has happened very, very quickly now, that technology was there 10 years ago in the UK but has not changed very much. Here, we changed within a year or two, it has been transformational.

I have got to fly over to Nadi tonight, you all know this, if you seat in the Domestic Departure Lounge, no one is saying a word to anyone, are they? They are all there, it is just like being on the subway in Hong Kong or Singapore but that has happened not with a generation, it has happened within almost a heartbeat that has changed.

I think that is what we are up against, we have got to constantly keep up with that. Our automotive, the car industry has gone to hybrid. So many of the vehicles on the roads are not petrol-driven vehicles, they are hybrid vehicles, electric vehicles will be the norm in a very short space of time. I mean, already there is a Formula 1 series using electric cars and have you seen it? But it is remarkable to watch because these vehicles are making 250 Horsepower in doing 250ks an hour and they are electric, you can see that.

With the changes in solar power, solar technology, all these are going to move very, very quickly. All our students now complain that there is no AC (Air-Conditioning) in every single room. That is the biggest complaint from our students. One of the rooms does not have AC working. Do you think 10 years ago you even knew what AC was? It has become an expectation so quickly as our standards change, so we are constantly trying to keep up with that so actually solar training for solar Engineers and training for AC is one of our biggest growth areas because it is becoming a universal expectation that we have these things. So you are actually right, but we think the best way to do it is to kind of work with international accreditation.

DEPUTY CHAIRPERSON.- Thank you, Professor, for your answers. Honourable Members, do you have anything or we just sum up now?

At this point in time, I would like to thank Professor Healey for a very comprehensive and detailed Report that he has been able to provide us. I am sure Honourable Members have a tremendous insight into FNU, the workings, the staff and all.

In the future, before we finalise the Reports, should we have any questions, we will write in and ask you, otherwise so far we are very happy to have a very detailed Report, and I think this is one of the longest deliberations we have had and we are very happy and we are interested in what you had delivered to us.

Once again, thank you very much for making your time to be with us. Thank you, Sir.

PROFESSOR N. HEALEY.- *Vinaka*, thank you.

The Committee adjourned at 3.46 p.m.