



### EDUCATION 5



SEMI - SMALL ENGINE **REPAIR SPECIALIST** 

11-12-21

CHEF ILIESA MENTORS **STUDENTS** 

# Educating and empowering communities FNU's Sustainable Livelihood Project to date has trained 20,000+ people

Saye<u>d-Kha</u> Minister for Ec ttornev-C graduates from the Sust

on-formal education provides a powerful way of developing skills and competencies in rural communities, which would otherwise find it very difficult to access more formal education and training in the urban centres.

Fiji National University through the National Training and Productivity Centre (NTPC) offers skills training for sustainable, self-sufficient living for people residing in rural and maritime areas around Fiji through the Sustainable Livelihood Project (SLP).

The government initiated project was launched in Kadavu in 2012 with the vision to empower people in rural communities to effectively utilise their resources, generate income and improve their standard of living.

The Nadi Declaration following the completion of the recent 20th Conference of Commonwealth Education provided recognition for non-formal and informal education and to support the role of youth and community workers in the delivery of these forms of education.

FNU Vice Chancellor Professor Nigel Healey said the SLP initiative was an effective way of empowering people in communities who would otherwise have limited access to formal training and proper skills development.

"The Sustainable Livelihood Project is community-based, with our trainers living in the villages for up to two weeks to carry out the training. This model, coupled with the fact that the training is provided free to the villagers, makes it highly accessible to all sectors of the community, from youth through mothers and fathers to the elderly. Formal education in urban

. Professo *IU Vice Chance* hood Project. le L

centres can never achieve this degree of accessibility and inclusivity. As climate change continues to threaten vulnerable rural and coastal communities, non-formal education offers a way of empowering people and helping to build resilience," said

Professor Healey There are four main objectives of the Sustainable Livelihood Project and four expected outcomes or benefits:

· People learn a skill which they could use in their everyday life, to improve their quality of living

People could use their newly acquired skill to earn an income – as in small business. Youths could use their skills and certificate as pathway into FNU programmes

People could use their SLP certificate to find jobs

There are 15 programmes offered under the Sustainable Livelihood Project and communities are selected by province. The NTPC teams holds discussions with the respective provincial administrators who advise and approve the specific districts and villages that would host these trainings.

"The courses are normally 80 learning hours (8 credits) spread over two weeks. Our trainers are experienced with competency-based assessment. So in principle, these short courses could be award-based, allowing those who pass to cross-credit them towards more advanced certificates or diplomas. This is something that FNU is actively exploring," said VC Healey. "The Sustainable Livelihood Project is a very innovative initiative by government, which has

allowed some 20,000 people in rural and coastal communities to benefit from hands-on training in a range of subjects, from small boat repair to engine maintenance, bakery, construction of bread ovens and basic accounting. It is a very tangible example of the way that FNU operates as the 'people's university', taking education and training out directly to the population in remote communities

Government provides around \$1.8 million annually for this project.

### Sustainable Livelihood Project background

Food and Beverage/Front Office

The purpose of SLP training are as Management Rural Stove Construction and

and Productivity Centre (NTPC). According to Director NTPC, Dr Isimeli Tagicakiverata the new division and SLP both fit-in well with the with practical skills that can assist components with 100 percent

The Sustainable Livelihood maritime areas is that these trainings Project (SLP) is a are brought to their door steps. Rural g o v e r n m e n t - f u n d e d people can conveniently access our development in terms of technical and vocational trainings to rural and for small business owners based in the biberglass boat repair and vocational trainings to rural and for small business owners based in the • Fiberglass boat repair maritime communities within Fiji and rural areas.' Rotuma.

The SLP forms the Division of Non- follows: Formal Education (DNFE), which is a • To promote development in rural Bread Baking new section under the National Training and maritime communities, peri-urban • Basic Cookery and Patisserie

organisation's vision and agenda.

individuals, family and community attendance to be eligible for a Certificate award

"The specific role of NTPC is very developments clear and that is firstly to provide in-• Help all alleviate poverty service training for industry, secondly unemployment

to provide specialised consultative services to assist the industry achieve • Assist in curbing rural/urban drift • Encourage/motivate young people to

their productivity goals, thirdly to pursue further studies **Course fee** manage the apprenticeship and trade • Provide an insight in the productive All training courses offered under the testing facilities and lastly to provide use of available natural resources to Sustainable Livelihood Project is free. training for Method B or small challenge individuals to start their own This is fully-funded by government.

SLP play a crucial role as we have over

6000 Method B employers but more Training offered than 81% have never claimed grant for The Sustainable Livelihood Project • All 14 Provinces in Fiji including

training at all," said Dr Tagicakiverata. offers a two-week face-to-face basic "So we have come up with creative training with a Basic Communications • Peri-urban centres / informal ways of facilitating training for our and Soft Skills module included in the small employers in Fiji. One way is following courses:

to provide cluster training, the second is to provide flexible-distance mode training and the third way is to use • Basic Block Laying Non formal rural training as avenue • Household Sanitary Plumbing for skills training for our Method B employers. The main benefit for rural • Joinery and Coffin Construction

and

#### Who can attend?

Open to all, minimum age of 15 years

### Target Market

Rotuma.

settlements

- Each participant can only attend
- one course during a duration of
- training
- Participants can attend as many courses during repeat training in
- their province or location.

### **Contact** Sustainable Livelihood Project. Lot 1 Beaumout road, Narere. Ph: 339-2000 Ext: 4507 | 4851 | 4507 | 4511. mail: MSLP@fnu.ac.fj | EO-TVET@fnu.ac.fj

### atumaitavuci expands her canteen business



family's growing demands and maintain their business. financial obligations

then decided to operate a small canteen from She applied basic business etiquettes such as her home. She used her savings to purchase budgeting, stock control and cash sale which her stock which was yaqona and packets of lead to her eventually recording profits. salted peas as these were amongst the fastest selling commodities in the village.

slow period and Ratumaitavuci struggled to I learnt the hard way and now I can manage finance her canteen business.

bad to worse and Ratumaitavuci reached bula kemami sotava eduatani, But what can I a point where she had to make a decision say, such is life. Besides, when you look on whether to continue or close the business.

But as fate would have it, Ratumaitavuci and you do it your way," she added was informed by her fellow villagers that From just selling two items, Ratumaitavuci a team from Fiji National University's has now expanded and is selling a range of Sustainable Livelihood Project (SLP) would items including canned meat, noodles, rice, be visiting the village in a few weeks to sugar etc

fter noticing a trend that she always solutions to the challenges I was encountering. ran short of money towards the We were also taught to be innovative and end of each week, thirty-one year think outside the box as business is something. old Liviana Ratumaitavuci realized that that is always evolving. We learnt a lot from she needed a second income to support her the training and I was able to use this in my

Following the training, Ratumaitavuci The Nabudrau villager from Noco, Rewa was able to get her business back on track.

"Even though a canteen business may not sound like the ideal choice, it's practical and Business flourished at first but then it hit a one that is needed in our village. I'm glad that my business properly. Starting any business Within a few weeks things escalated from is hard work. E dua na cakacaka levu. Io na the bright side, you get to do what you want

### Semi - small engine repair specialist

problems with small machines things are finalized. such as brush-cutters, electrical appliances and washing machines.

His fascination with engine repairs started at a young age and today Baleitamana offers affordable door to door repair services.

Baleitamana was determined to learn more about maintenance and repair which led him to sign up to do short courses offered through FNU's Sustainable Livelihood Project.

"While I focused on my children's development. education, I too wanted to up skill myself and organise my business properly. Our village was informed that a team from the Sustainable Livelihood Project recently visited Vunisea to conduct a survey and this was our chance to sign up," said Baleitamana.

'I have been repairing small engines like brush-cutters and generators for some time. During the training the instructors showed us real life scenarios that we could relate to and help us understand where to improve in our businesses. Now i'm able to repair outboard engines and electrical appliances. SLP helped me to learn more and I applied the skills which I learnt and now I am able to better support my family as I get more jobs from people on the island.'

'Most of the time, people throw away their gadgets and appliances when it doesn't work. If you are good at fixing things, you can make a fortune by collecting and fixing these items and selling it to those who need it.

The Muani villager praised the SLP team for the training they have been undertaking around the country.

'This training has boosted my business now I'm also able to repair twin tub washing machines and ovens. I didn't think I would get this far," he said.

emi Baleitamana is known as Baleitamana is currently working on the 'fixer' and is the go to person registering his business. The father of four in Kadavu if anyone is having is optimistic he will receive more jobs once

"I have been in touch with the Provincial Administrator to register my business here in Kadavu. The demand is growing and I also help out at Muani Village School whenever they need items fixed."

Baleitamana said people in rural and Maritime areas should take advantage of the government funded initiative as it provides avenues for income generation and also skills



### Maria ventures into plumbing

hirty-seven year old Josifini Maria of Lovonivonu village in Taveuni had no plumbing experience let alone any knowledge of how to join pipes or fit a water tap, but she always had an interest in taking up a blue collar profession.

"Growing up as a child I always wanted to work outside and trades such as carpentry and plumbing fascinated me but I couldn't get an opportunity to learn any of these trades properly. I managed to fix things but this was done in an ad-hoc manner," confessed Maria.

Maria's luck changed when the Sustainable Livelihood Project team visited her village and she quickly signed up for the Household Sanitary Plumbing training.

"From a young age we are taught how important and essential water and electricity is to us. However, if there is no electricity we can survive but water is life and we cannot live without it. In the village I know that we can improve on how our water and waste systems work. I wanted to learn how to do this the proper way and at the same time educate others. So I decided to enrol for the two-week SLP training," said Maria.

"At the beginning of the training I was worried that I may not be able to handle the pressure.



Some of the pipes were heavy but I managed to handle things. The training taught us how to install water tanks outside the house, connect and lay pipes from the main tank, set-up a flush toilet system and install a shower system.

"It was funny as sometimes during the course I got confused with pipes, fittings and its uses, but slowly I was able to learn everything. Prior to the training, when we would open the taps there used to be air bubbles and I didn't know what this meant or how to fix it. Now I'm familiar with these and can fix it easily. Au marau va levu na vuli qo. I was fascinated to learn about the small fittings and the various areas of plumbing especially for a rural setting.' Maria said while undertaking the training, she was approached by several women in the village to look at minor plumbing issues they were encountering. She said this boosted her confidence and she hopes to further her studies in plumbing through the Fiji National University

conduct a range of short courses. She also recently applied for Government's She jumped at the opportunity and small grants assistance where she received registered herself to undertake the Basic \$1,000 which provided further financial boost Business Management training. The two- to her business.

week training according to Ratumaitavuci was an 'eye-opener' and provided her with you have to work hard to reap your rewards. the right skills and knowledge to operate a There are some women in the village who business

"I have learnt that nothing comes easy and are operating from their homes doing screen

"Prior to undertaking the SLP training I sold printing or kesakesa, floral arrangements, only two items. It wasn't profitable and most sewing garment. Everyone is working hard of the time the business would incur losses. and I know they all will be successful," she There were occasions when I ran short of said

"I'm proud to say that I'm slowly climbing cash and then there were times I did not have any products to sell. On a good week I would the steps of success. I earn around \$200 make around \$100 but it wasn't enough to run a week, which assists with meeting my a household with four growing children and a family's expenses and I'm grateful to FNU husband," said Ratumaitavuci. and Government for their assistance. I have "The Sustainable Livelihood Project plans to expand my canteen and sell a greater provided us real life scenarios and practical variety of products to the villagers."

"I was always encouraged by my family that if I wanted to do something, I could do it. I think there should be more women taking on such courses," she said.

Like the rest of my fellow villagers, I am grateful to the Fiji National University and the SLP team for providing us with basic training and skills.

# STUDENT SPOTLIGHT



enthusiasts, Benjamin Charlie Junior always dreamt of being recognised for his talents back in his home country Solomon Islands.

With a passion to play both soccer and tennis, as a young boy Benjamin Junior dabbled between the two sports, until he turned eight, when his father, Joel Benjamin took his first tennis lesson.

Joel Benjamin is one of Solomon Islands top Tennis coaches having mentored many top players over the years which placed the island nation on the Tennis map in Oceania region and the International scene. Benjamin Junior lined up with the rest of the youngsters his father was coaching which signaled the beginning of a sporting adventure.

Benjamin Junior was a quick study and not long after, he began winning titles in the junior grades. His excellent performance saw him receive the International Tennis Federation (ITF) scholarship and move to Fiji. This prestigious scholarship is offered to select elite players from Pacific Island countries to train and continue their secondary school education in Lautoka.

"I had visited Fiji a few times as a voungster playing in a few tournaments. When I was awarded the scholarship I was really excited to advance my skills in Fiji. I had a few friends here already so I was excited to meet and play with them on a regular basis. Fiji is the only country in the Pacific where tennis is played fairly widely with several major tournaments so I was really looking at doing my best here," said Benjamin Junior.

He studied at Lautoka Central Primary and then at Natabua High School. Over the years, Benjamin Junior's game improved and he rose to become Solomon Island's top Tennis player, a position which he still holds. He featured in all major tournaments in Fiji as well as representing his country at the 2015 Pacific Games.

After completing his secondary school,

rowing up in a family of sports he was lined up for an American College tennis scholarship; however Benjamin declined this offer and opted to join Fiji National University to study Certificate IV in Sports Science from the College of Humanities and Education.

> "I turned down the U-S scholarship because over there, they are more focused on Tennis. I have a dream of becoming a personal trainer and that's the reason I chose Fiji National University for my tertiary studies.'

> "Here, I will be able to concentrate on my school work and at the same time work towards my goal," he added.

> Being at FNU and studying sports science has opened doors for Benjamin Junior in experiencing other sports as well as re-kindle his love for football.

> Recently, he made his debut as a striker for the Rewa Football Club in the Under 19 national competition. Known for his speed and crafty football skills, Benjamin Junior is currently the competition's leading goals scorer with seven goals in five matches.

> "I really enjoy playing for Rewa. I have made lots of friends and they are very supportive of me. I hope to gain more experience and get selected into the main team," he said.

> During his spare time, Benjamin Junior can be seen around the Victoria Tennis Courts in Suva, assisting his Tennis coach Andrew Mailtorok giving lessons to new and upcoming players.

> 'I help out like a part-time trainer. It's a lot of fun and in particular, I love training the young children as it always brings back good memories of the past of how my dad used to coach me.'

> Benjamin Junior says studying at Fiji National University is enjoyable. He said the lecturers are approachable and assist students with any difficulties they may have.

> "I have made many new friends at the University and we play and study together. All our lecturers are really nice and clearly explain to us if we don't understand or are having difficulty in learning. I love going to the library to do research or my assignments," he said.

> Benjamin Junior hopes to graduate with Certificate IV next year and then enroll for the Trade Diploma in Sports Science programme at FNU

### Incorporating wellness at work

BY : Mr Venasio Ramabuke | College of Medicine, Nursing & Health Sciences

he World Health Organisation (WHO) defines off, slow down. The muscles in the lower body are wellness as "a state of complete physical, mental, turned off. And after two hours, good cholesterol and social well-being, and not merely the absence drops 20 percent. Just by getting up for five of disease or infirmity". The definition certainly minutes will get things going again. These things exceeds common definitions of wellness as being a state are so simple yet easily disregarded. of surviving without the compromising burdens of signs The key to having a successful wellness program at of diseases. One may not be diagnosed with a disease but work is encouraging overall wellbeing while still persistent exposure to an environment that nurtures poor keeping it fun. Like all other planned activities, health habits will ultimately lead to the appearance of it must draw and sustain the interest of the target diseases sooner rather than later. This broader definition population to remain effective. If a workplace of wellness also reminds us that the body is so closely interlinked and functions inter-relatively to all the then the wellness program ideas will quickly lose

the 1970s and have gained new popularity as the push ideas and see what your team values the most. for cost savings in the health delivery system becomes Work and health related agencies such as the more evident as a result of high health care expenditures. workplace health and safety committee must be in a unique position to be a good influence more on health and general well-being. After all, working a shift in outlook on the significance of people spend more of their waking time on the job than incorporating wellness strategies at work. anywhere else. Fiji, like other third world countries is Below is a list of simple employee wellness currently facing the struggle against the constant rise in program ideas that can easily be implemented at Non-Communicable Diseases (NCDs). A majority of early the office: deaths occurring in the working age implies a major social disturbance that needs rectifying. Majority of the working hours is spent sitting down in daily or weekly basis offices, meetings, conferences, and the list goes on. Sitting • Encouraging staff to take stairs instead of lifts down in front of the desktop the whole day is not healthy. • Adding in physical movement and stretch Prolonged hours of sitting are associated with a significant breaks during work higher risk of heart disease, diabetes, obesity, cancer, and • Changing healthy meal plans and snacks for depression, as well as muscle and joint problems. Experts meetings and conferences now say in a daily working hour, one should stand-up and •Recognising and rewarding those who engage walk for at least two minutes. Today, the average office and champion workplace wellness initiatives. worker sits for about 10 hours, first all those hours in front •Offering subsidised membership fees to gyms of the computer, plowing through e-mails, making calls or for employees writing proposals — and eating lunch and then all those • Allowing flex-time for wellness programs hours of sitting in front of the TV or surfing the Web at It is of utmost significance to place priority home. The metabolism slows down 90 percent after 30 on employee's health and wellness in order minutes of sitting. The enzymes that move the bad fat to ensure the maintenance of workplace from the arteries to the muscles, where it can get burned productivity and continued success.

wellness program cannot get members engaged physiological systems. Workplace wellness programs have been around since workplace, make your initiatives fun, try new steam. So if you are planning a program for your proactive in advocati g and



· Organise scheduled physical activities on a



### **FNU students mark** Earth Hour

s an island nation, the accelerating effects of climate change is unfortunately fast becoming a grim reality.

Hence, it is important that there is continuous dialogue and action to ensure that everyone is aware of the great phenomenon that our planet is facing and what can be done to mitigate and minimize the impacts of climate change.

The Fiji National University Student's Association (FNUSA) Executives marked Earth Hour by engaging in discussions about the impact climate change has been having on island countries in the Pacific including Fiji.

Fiji School of Medicine Student's Association representative, Melissa Sami elaborated the urgent need for people to take action to save our planet. She highlighted how biodiversity (the rich variety of life on Earth) continues to decline yearly and the need for everyone to ensure sufficient

priority is given to saving our planet. "Every year more and more countries join the fight against climate change. Activities like candle light dinners, candle light yoga, star gazing and sporting famous landmarks turned that one hour into a fun event that involves the whole family," said Sami.

"We need everyone to take real action - from governments and businesses to communities and individuals to urgently reduce the emissions that accelerate climate change and prepare for the inevitable impacts of a warming planet some of which we are already experiencing."

"The evidence is real and in front of our eyes. There has so much loss in just a short span of time as we have recently experienced in the Western division. The recent tropical cyclone and floods devastated communities. It is heart wrenching to witness the same communities being affected repeatedly with the change in weather patterns. Families in the West have not fully recovered from the devastating effects of TC Winston and now the recent floods have made their lives even more difficult," Sami added.

She challenged those present to contribute to the fight with simple gestures such as switching off lights when not in use, taking a walk to short distances rather than using vehicles, acquire the habit of recycling and purchase locally made products. The discussion was attended by FNUSA national executives, branch presidents and students.

Participants were provided with tote bags and stationeries as a token of appreciation.

### Students receive stationery packs

Nirty-five students attending Ba Campus, who were victims of floods caused by tropical cyclones Josie and Keni were given stationery packs sponsored by the Fiji National University Student's Association (FNUSA).

The packs consisted of books, stationery and bottled water together with school bags.

FNU Vice Chancellor Professor Nigel Healey who was present at the ceremony praised the students for their resilience and commitment to continue with their studies.

"I know you all are going through a very difficult situation following the recent floods but I'm grateful to see that you all are trying to take things positively and have not lost hope. I applaud you all for your efforts and wish you well in your studies and examinations," said Professor Healey.

The Vice Chancellor also commended the student association's initiative in reaching out to their affected members.

"I'm impressed by the initiative of FNUSA and this also gave me the opportunity to speak with the students at the Campus. FNUSA is growing increasingly where they are not only the voice of the students, but the association is also providing other services and this is one of them," Prof Healey added.

Association President, Ketan Lal said the packs will provide a relief for the trimester students sitting for their finals in the final week of this month.

"You all encountered the brunt of two cyclones and further face challenges in terms of getting your belongings together after the flooding but despite all these odds you are here today. This shows your commitment towards your studies and I hope these stationery packs will assist you in preparing for your finals," Lal said.



#### Navneeta Nair

Medical Laboratory Science Student Association - President



he Medical Laboratory Science Student's Association partnership with the Fiji School of Medicine Student's

Association (FSMedSA) recently organised a week-long donation drive at Pasifika Campus to assist families that were affected by tropical cyclones Josie and Keni. As medical students and future leaders of Fiji we have to be mindful of what is happening

around us and assist in whatever way possible to bring relief to families that suffer during such catastrophes. This is the vision of our committee and seeing the hardships many families went through during the back to back cyclones, we decided to undertake this appeal.



Fiji National University

We were over-whelmed with the response and support from the University community and well-wishers. The donation items mainly consisted of clothes, blankets, beddings, some groceries and cash. It was also truly encouraging to see the strong support from the University students.

All items collected were distributed to affected families in the western division by our members. It was really a rewarding experience and we were able to hear the hardships being faced by the affected communities. It was a fairly uplifting experience for all of our members. Whatever we shared with the disaster victims truly lifted their spirits and we do hope that our efforts positively impacted their lives.

We are indeed grateful to those who have generously participated and supported us through-out this campaign. The Association will continue to undertake more community projects in future and we hope this will encourage more people to come forward and assist those who are less fortunate.



enior academic, Professor Paul Ade Iji has been appointed as the new Dean of the College of Agriculture, Fisheries & Forestry (CAFF).

Originally from Nigeria, but having spent the last 13 years in Australia, Professor Iji has more than thirty years of experience in the education sector and is excited about joining FNU.

Professor Paul Ade Iji said his vision is to ensure all students receive the best quality education while at the College.

"We are here for the students because the students are our products. The kind of graduates we produce will testify to the quality of programmes we offer and trainings we impart. Graduates of agriculture, fisheries and forestry should be set apart from other professionals because we are trained not for office works, but for community services," said Professor Iji.

The Australian citizen aims to set a new benchmark at the College focusing on three key principles: teaching, research and community service.

"I'm impressed with the work that is currently being carried out at the College but I can see more ways which we can further enhance and develop our staff and students. We need to continuously improve in all aspects of teaching and learning to ensure our students do not miss out on any opportunity."

"We definitely need to invest more in research and opt for further developments with other agencies and ministries that are willing to assist us in ways that can positively contribute to the success of the College. And of course, we will need to increase our community service in ensuring information is passed out to the public

and we need to host events that will enable us to reach out to the general public through expositions, farmers day or agriculture shows," added Professor Iji.

An Animal Scientist by profession, Professor Iji served as a Professor with the School of Environmental and Rural Science with the University of New England in Australia prior to joining FNU.

Professor Iji is an avid researcher and has published one book, nine book chapters, more than 130 journal papers and presented more than 170 conference papers around the world.

He has served as a high school teacher, assistant lecturer, graduate associate, lecturer, associate professor and postdoctoral fellow in Nigeria, South Africa and Australia. FNU is delighted to have Professor Iji on board to lead CAFF.

### Fact File **QUALIFICATIONS**

#### Academic 2007

Graduate Certificate Higher Education University of New England, Australia 1998

PhD Poultry nutrition

The University of Adelaide, Australia 1990 MSc Animal Production

University of Aberdeen, Scotland 1986

Bachelor of Science Honors Animal Science (1st Class) University of Maiduguri, Nigeria

Awards and Professional Development

2010 Registered Animal Scientist, Nigeria

2007 Registered Animal Nutritionist, Australia

2006 Nominated Supervisor of the Year, University of New England, Australia 2003 Rated C2 by the South African National Research Foundation.

2002 Post-doctoral Research Fellow,

University of Pretoria, South Africa. 1999-2001 Post-doctoral Research

Fellow, University of Natal, South Africa. 1994-1998 Australia Development Corporation Scholarship

1992-1993 Graduate Associate, International Livestock Centre for Africa,

Kaduna, Nigeria. 1989-1990 UK Overseas Development

Administration Shared Scholarship. 1986 Best Graduating Student, Animal Science, University of Maiduguri, Nigeria.

### Invest in Maintenance Management to Improve Productivity

BY : Dr Anil Rana, Associate Dean Research | College of Engineeirng, Science & Technology

aintenance' as a function, has today attained a very vital status in any industrial set up. From the beginning of the 19th century when it was regarded as a necessary evil, today it is seen as a vital tool to improve productivity. It's a function which if managed scientifically has the promise to improve the ROI (return of investment), reduce the COGS (cost of goods sold) and boost OEE (Overall equipment effectiveness). However, if not managed properly, it can cost the industries dearly in terms of quality, safety and cost. From the studies done over the late 20th century, it was found that maintenance functions could easily cost anything between 50 - 65% of the total operational budget. This was found to be true for all industries across the board and included water services, power generation and distribution, defence services, manufacturing industries etc. With the globalisation competition pressure forcing the hands of the senior management, they reluctantly invested in maintenance management and in return found surprising results that pushed them ahead of the rest. Those who still kept thinking were lost in the race for survival of the fittest. Of-course the public sector industries funded by the governments through taxpayer's money survived anyhow. So what has changed so far in the maintenance field? From a time when maintenance decisions were generally based either on OEM (original equipment manufacturers) recommendations, it now sees use of AI (artificial intelligence) based predictive maintenance. The practice of reactive or corrective maintenance still continues, though only for small cost, constant failure rate, un-critical components. The maintenance engineering today uses the knowledge based on Reliability Engineering and measures the parameters

such as Mean Life, Mean Time to Failure, Mean Time to Repair, criticality of component to availability of the system, parameters of failure distributions for various failure modes etc. This knowledge helps in focusing the resources of the industry on equipment that matter the most. It helps in managing the cost of the system over the entire life cycle. The maintenance management term has now been recoined as "Asset Health Management".

The knowledge also assists in shaping the maintenance strategy for the entire system and design optimum maintenance policies for the subsystems For instance condition based

where they could be trained adequately in the presence of large data. The application of one such system for making decision on quality of maintenance activity in the presence of fuzzy inputs has been demonstrated by SME (School of Mechanical Engineering) of FNU in a journal paper.

What does it take to implement the new maintenance management methods? For a start, the entire system needs to be studied by qualified reliability and maintenance engineers. The system is modelled in terms of their functional dependencies and interconnectedness. Hierarchical layers of systems, sub-systems and sub-sub-systems are identified along with their functions, failure and failure mode definitions. Operation profiles, redundancies in the system and existing maintenance and repair strategies are studied. Data on failure and repairs are analysed. The system can be simulated in advanced reliability software such as Reliasoft (available with Fiji National University) to evaluate the effect of improved maintenance strategy based on scientific facts rather than simple OEM (Original Equipment Manufacturers) recommended thumb rule. Strategies such as RCM (Reliability Centred Maintenance) and TPM (Total Productive Maintenance) can be implemented to get the maximum out of every dollar spent on maintenance. In Fiji, the maintenance management techniques holds great promise to improve productivity in industries such as Fiji Electricity Authority (FEA), Water Authority of Fiji (WAF), Fiji Sugar Cooperation (FSC), food processing industries, shipyards, and many more. The Fiji National University can assist in implementing these techniques or alternately train the existing staff to design and implement strategies on their own



predictive maintenance is now being practised the world over. It uses vibration, oil condition, thermo graphical and other technique based measurements to analyse the condition of the equipment. Maintenance is performed only if the condition of the equipment demands so. Maintenance management helps balance the high investment cost of these techniques vis-àvis the cost advantages that accrue from it for the overall improvement in productivity of the system. Besides, systems which are highly critical from the point of view of human and environmental safety, maintenance management helps in analysing the design and suggest suitable cost balanced redundancies to further improve the system reliability. It can help simulate the failure modes and allow the engineers to study the overall impact of such design improvements

The recent advances in the field of AI have also come as a boon to the maintenance engineers. It has helped remove the human error factor in fault diagnosis and decision making to a large extent thereby improving the effectiveness of maintenance management. Most of the AI applications though are being used only in areas of fault diagnosis in systems

### NEW CENTRE TO OPTIMISE STUDENT SUCCESS



n an effort to strengthen the quality of graduates and advance learning and teaching in tertiary education, the Fiji National University (FNU) has established the Centre for Learning and Teaching Enhancement, under the Office of the Pro-Vice Chancellor – Learning and Teaching.

With a core role of staff development and student learning enhancement, the new Centre will create a more holistic learning experience.

**FNUNIKUA** recently caught up with the Associate Dean Learning and Teaching Enhancement, Dr Deepak Prasad who is tasked with setting up this Centre and ensuring all its objectives are achieved.

#### Briefly share with us your work experience prior to joining the Fiji National University.

I served The University of the South Pacific (USP) for over 10 years, where I worked in areas such as educational technology, learning experience design and open education. I also had a stint in Australia, working as a part-time learning designer for the Queensland University of Technology. In addition to my experience in higher education, I have also taught in various secondary schools in Fiji. In a nutshell, my career so far has been in different levels of education – from secondary school to higher education, from professional development to lifelong learning, I have thoroughly enjoyed and learnt from those experiences.

#### Highlight your academic qualifications.

My Postgraduate qualifications include a PhD in open education from Kumamoto University in Japan; Master's Degrees in Intellectual Property Law and in Educational Technology from the Queensland University of Technology and University of Southern Queensland, respectively; two Bachelor's Degrees from The University of the South Pacific in Engineering and Education; and a Diploma in Tertiary Teaching from Fiji Institute of Technology (now known as the College of Engineering, Science and Technology, under FNU). I have received fellowships from the World Intellectual Property Organisation and the Japanese Government Monbukagakusho, and awarded Dean's Commendation for outstanding achievement in research from Kumamoto University.

### Explain the importance of the establishment of the Centre for Learning and Teaching Enhancement (CLTE)?

With the establishment of this Centre, FNU has taken a significant step towards reaffirming its commitment to nurture an efficacious academic ecosystem by supporting faculty and instructors with professional development and teaching enhancement activities to scaffold different approaches to teaching-learning that support enhanced student learning outcomes. Today's job environment demand students to be ready for the job market, have advanced ICT skills and ability to adapt and perform like a lifelong learner. The CLTE as a centre of excellence will focus on improving the quality of our graduates.

### How will students benefit from this Centre?

The Centre will create an engaging environment for the students to provide personalised learning hat meet their unique requirements. An array of free-of-charge academic support services—such How will the Centre work with departments at the University to ensure students receive the best learning experience?

Collaboration is at the heart of the Centre's commitment to cultivate an extraordinary learning experience for all FNU students. Hence, the Centre will work alongside academic and support staff to coordinate, stimulate and introduce purposeful support services and facilities to foster an institutional culture that values student needs and responds to the same in a timely and meaningful manner to ensure that all students have a rewarding and successful experience at FNU. The Centre will also work closely with the student bodies and with colleagues who have a similar remit in other institutions.

### How will the Centre aim to improve learning and enhance teaching?

The Centre will provide support to both academic staff and students to enhance teachinglearning across the University. Several new initiatives are planned for improving learner outcomes. Some of these include first year student mentoring programmes, peer assisted study sessions (PASS), and implementing university-wide learning analytics system to monitor student progress to enable early detection of students who are lagging behind in their performance and need support/intervention to be successful in a course or programme. To assist teachers better their art, the Centre will initiate peer assisted teaching scheme, provide professional development opportunities, and promote scholarly teaching and the scholarship of teaching and learning to build on teachers' already excellent pedagogic research and practices.

#### What are your immediate plans for the Centre?

My immediate plan is to take stock of teaching and learning needs in the University. Consultation with College constituents to assess programmes, technologies, and services that support their teaching and learning needs is already underway. Other priorities are to get full a complement of staff and to develop a website for the Centre to create awareness and provide knowledge and information about the Centre. Social media channels would also be utilised to this effect. The Centre will take steps to ensure that all FNU staff and students are aware of the Centre and its services.

#### What new things can students look forward to from the Centre?

Students can expect more technology-enabled learning and support services. One of the envisioned innovations is to create a "FNU Learning Experience" App to enable students to record their learning and overall university experience and help them and the relevant stakeholders identify areas for improvement. The major advantage of this initiative is real time data analysis allowing quicker and more effective decision making and intervention. A repository for Open Educational Resources—materials available freely either in public domain or with an open license to use and adapt for teaching, learning, development and research—would be created to give students access to quality learning resources to supplement their study materials.

#### What is your 3 year plan for Centre?

as academic texts and the writing process, speaking and presentation skills, and reading and study skills—will be accessible to students in face-to-face, blended and online modes - at any point in their studies. The Centre will also make available self-directed online courses to help students to enhance their job readiness by developing effective learning strategies, decision-making skills, critical thinking skills, creative problem-solving skills, values and attitudes, thus laying a firm foundation for life-wide learning.

The Center's main aim is to optimise student success. And to achieve this, the Centre will work on creating an enabling learning environment by promoting evidence-based approach to teaching, facilitating the effective integration of technology in the teaching and learning process, providing support, guidance and resources to students that will help them get the most out of their learning efforts.

### Find out what's happening on your campus

<u>May Graduation</u> <u>College of Business, Hospitality & Tourism</u> <u>Studies</u> Wednesday 2 May, 2018 | 10am | FMF Gymnasium

College of Engineering, Science & Technology Wednesday 2 May, 2018 | 2pm | FMF Gymnasium

College of Agriculture, Fisheries & Forestry

National Training & Productivity Centre Thursday 3 May, 2018 | 10am | FMF Gymnasium

College of Humanities & Education Friday 4 May, 2018 | 10am | FMF Gymnasium

College of Medicine, Nursing & Health Science Tuesday 8 May, 2018 | Novotel Convention Centre, Lami

#### **2018 Engineering Exhibition**

Theme: Engineering Innovation for Sustainable Future

Derrick campus, Samabula Date: 10 – 11 May 2018 | Time: 9.00am – 4.00pm

Ba campus Date: 11 May 2018 | Time: 9.00am – 4.00pm

#### Inter Campus Games

Registration for the 2018 Inter Campus Games is now open. Teams can register in the following sports: Rugby 15's, Rugby 7's, Soccer, Futsal, Netball, Volleyball, Basketball and Touch Rugby.

Deadline for registration are as follows: West – 15 June, 2018 | North – 15 June, 2018

# MY FNU

### Iliesa Cokanasiga

### **Chef Iliesa** mentors students

rowing up in Tavua village, located on Malolo Island which forms part of the Mamanuca group, Iliesa Vuki Cokanasiga grew accustomed to interacting with tourists and locals who worked in the growing tourism industry.

He was fascinated by the different accents of the visitors and he always greeted them with a big smile saying 'bula' and he received the occasional 'bula', thumbs-up or casual wave in return. Cokanasiga did not need much convincing as the youngster made up his mind early in life that he will be working in the tourism industry.

"Back in the village we all relied primarily on tourism. Almost everyone was either directly or indirectly involved with this industry and I always knew that I will work at a resort," said Cokanasiga.

With big plans and a passion for cooking, young Cokanasiga was determined to make a name for himself as a chef.

Education

In 1993, Cokanasiga completed his secondary education at Nadi Sangam College and enrolled at the Fiji Institute of Technology (now known as the College of Engineering, Science and Technology, under FNU) to pursue a Diploma in Hotel Management majoring in Food and Beverage.

"During my time as a student at the School of Catering Service, practical classes were a priority. Every student was expected to take on practical classes and that boosted our confidence. So when it came for industrial attachments we were ready, having undergone intensive training and practical classes in school. It became easy for us to adjust to real situations in the hotels and resorts."

After completing his Diploma, he enrolled at the Fiji National Training Council (FNTC, now known as the National Training and Productivity Centre, under FNU) to undertake a course in Professional Food and Beverage Services.

Before he graduated, the youngster secured his first job at the Air Terminal Services (ATS) Limited as a Trainee Cabin Hand and Trainee Cook.

#### Work life

After a brief stint at ATS, Cokanasiga moved to Matamanoa Island Resort.

"This is where the biggest breakthrough in my career came. I started off as a trainee waiter, moving on to a trainee cook before being promoted to a Cook. At 22 years old, I was one of the youngest to be appointed in this role and it encouraged me to grow further," he said.

He spent four years at Matamanoa before joining Tokoriki Island Resort as the Senior Cook, and then Captain Cook Cruises as the 2nd chef.

"There are different levels of cooks in a resort and as the Senior Cook my main role was to prepare **mise en plas** (*in a professional kitchen the preparation of dishes and ingredients before the beginning of service*) to meet customers' expectations. Working at resorts we deal with people of all walks of life so everyone has different expectations and tastes and we have to always be mindful of this."



resort. I'm appreciative that this opportunity came to me very early in my career. I spent three years at the five-star resort and this will always remain as one of the highlights of my career."

Cokanasiga continued to pursue his career and served as the Sous Chef at Mana Island Resort and Spa.

"I spent three years at Mana and it was another gratifying experience for me. I always believe that the higher you go, the more responsibility entrusted upon you and I learnt a lot while working there."

### **Further Education and Farming**

Cokanasiga decided to take a break and enrolled at The University of the South Pacific to pursue a Bachelor of Commerce in Hotel Management.

"With the advancement of education and more graduates coming out with degree qualification, I knew I had to upgrade myself in order to be able to compete." different environment to be in but an exciting, challenging and inspiring one."

"As a lecturer we come across students from all walks of life and I get to share experiences that I hope will inspire them. I try to understand every student's capabilities and encourage them to do better. It's a fulfilling experience and something I truly enjoy."

### Family and Faith

Looking back, Cokanasiga believes his faith and family were the key to his success.

"My parents are my biggest support. Without my parents I would not have been able to achieve what I have today. And every little success I achieved, I always dedicate to them because I believe in my heart that they are the ones praying for me," he said.

"A day in the life of a chef is always busy. You always have to be on your toes but it's one of the most rewarding jobs when you see the satisfaction in your customer's happy faces," he said.

In 2008, Mr Cokanasiga was appointed the Head Chef at Turtle Island Resort, which he described as 'very rewarding'. "Anyone who wants to make a name for himself as a Chef, the ultimate goal is to become the Head Chef at a prominent Cokansiga worked on his sister's farm while he studied and after graduating he decided to go into teaching.

Last year the 40 year-old stumbled upon an advert for Assistant Lecturer – Food and Beverage at FNU's School of Hospitality and Tourism Studies.

"When you have reached the peak of your career, you often begin to consider other ways to contribute to the industry. For me, this came in the form of being a tertiary teacher. It's a very The teary-eyed thanked his late father, Mataiasi Cokanasiga and his Uncle Waisale Naqei for being his role models.

"Not forgetting all my families, relatives and friend back home and around the world, Taukei Motu, my work former colleagues, David Harrison, Dawn Gibson, Hupfeld Hoerder. and my work colleagues at the Fiji National University."

"I always tell my students that nothing in this world should supersede your relationship with your parents and God. Faith and family should always be number one."

The Fiji National University's Nikua is a monthly newsletter which aims to promote the University's activities to the wider community. This newsletter is designed by the University Marketing and Communications team. For views or comments please email mprc@fnu.ac.fj or contact 3394000.

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**FNUNIKUA** wants to hear from you Please send your suggestions, comments or articles for consideration to mprc@fnu.ac.fj



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