Profiles of Renewable Energy/Electrical Engineers

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Education
- Bachelor of Technology (Electrical Engineering), University of the South Pacific, Fiji
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Job Description
- Coordinate the GEF-PAS (Renewable Energy & Energy Efficiency) Project for Nauru, Niue and Tuvalu;
- Coordinate the Special Initiatives of the Energy, Ecosystems and Sustainable Livelihoods Initiative (EESLI).

Advice to Students
“Have fun whilst studying!! Most engineers are so engrossed in their studies that they only realized that life has passed them by too late. Read widely as possibly can that relates to your engineering field, and now apart from engineering, the move is towards sustainable development and addressing environmental issues, so one should be well versed with that too. It is more practical and helpful for students (in preparation for work) to undertake research and work experience for any type of engineering studies so I will encourage students to think about that once they consider studying engineering. I would encourage more women to study engineering as we are good at project management and problem solving and multi tasking!! Women should not be intimidated by the fact that engineering studies is for men only.”

Interview Segments

Q: When did you know you wanted to become an Engineer?
Gonelevu: Whilst in primary school (around 8 years old or so), Dad who was the Chairman of the Fiji Electricity Authority then, took the family for a weekend to Monasavu, whilst the first hydro project (80 MW) in Fiji was still being built. In watching the engineers testing the turbines & other hydro equipment and being told and watched the water from the dam would be pumped through these turbines and be converted into electricity stirred an interest in engineering and to know how electricity can be produced from other sources other than fossil fuels.

Q: What was your university experience like?
Gonelevu: My university experience was full of fun and unforgettable memories. I’ve made some lifelong friends. In spite of the fact that we undertook one of the toughest courses (and too much information overload), we managed to stick it out till the end. Being few women amongst our male colleagues was interesting at times but we were always treated with respect.
Q: Did you incorporate work experiences while you were an undergraduate student?
Gonelevu: Yes, part of the undergraduate programme is to have a one-month attachment with a company/government department. Interestingly, I did my work attachment with a telecommunications company (FINTEL) for one month and was also working part time as a Student Technical/Office Assistant with the university’s IT department.

Q: How did you get your first job?
Gonelevu: I was offered a job at the Fiji Institute of Technology (Ba Campus) to teach Technical Communication & Computing.

Q: What’s the most rewarding thing about being an Engineer?
Gonelevu: The most rewarding thing about being an engineer is that you make a difference in people’s lives through the provision of infrastructure that will improve their livelihoods and assist them to do better in life. For example, provision of solar lights in rural areas assists students to study at night and mothers to undertake income generating activities, etc.

Q: Is there an example you can provide that shows how something you’ve worked on has positively impacted the world?
Gonelevu: I had undertaken numerous solar, hydro and biofuel projects in Vanuatu, Fiji’s rural areas that included lighting, water pumping, refrigeration, etc.

Q: Do you spend a fair amount of time traveling?
Yes. In the earlier years, it can be up to 2-3 months away from home but that has improved to only a week or so away from home for project management purposes or meetings only.

Q: Do you have a mentor? Or did you in your college years?
Gonelevu: My parents have always been my mentor. Both my parents were professionals in their own careers but have managed to instill personal values of dedication, honesty, hard work and giving the best in whatever undertakings any of their children pursue and this has helped a lot in my career. Dad is an electrical engineer by profession so that helped shaped my future as well 😊
My first Director of Energy was Devendran Kumaran, who also assisted a lot in shaping the work that I do now, by allowing me to manage projects, write Cabinet papers, project proposal, presenting at international, regional and local meetings in the first two years I joined as an Energy Analyst and always challenging me and my colleagues to think outside the box whilst addressing rural electrification issues.

Q: Do you find yourself working more in a team situation, or more alone?
Gonelevu: In most renewable energy projects, most projects are undertaken by a team but for project proposal writing, designing, report writing and other desktop related activities, I usually undertake the work by myself.

Q: Do you find you are able to balance work with social/family life while working in your current job?
Gonelevu: Work and social life basically come hand in hand but balancing it with family life can be difficult at times especially when travel and time away from home for longer periods of time is involved.

Q: Did you think that school prepared you for the way the work gets done in the real world?
Gonelevu: Having an Engineering background has given me strong analytical basis and problem solving skills...however what is needed is work experience & common sense to succeed in the real world......
Q: Where do you see jobs for Engineers in the future? What should students be doing to prepare themselves to take on those roles?

Gonelevu: Jobs for engineers in the future will be more innovative and challenging as lots of technologies have been piloted now and will be commercially available in the future.

Students should take time to read and research on these technologies whilst at university and not to totally rely on theory/what the lecturers have designed for the course. Students who undertake research should choose topics that can be further utilized when they go out into the working world.

Q: What other advice do you have for students?

Gonelevu: Have fun whilst studying!! Most engineers are so engrossed in their studies that they only realized that life has passed them by too late 😔😔😔

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