

# Surveying Challenges in the Fiji Islands

Angina S. PRASAD, Fiji

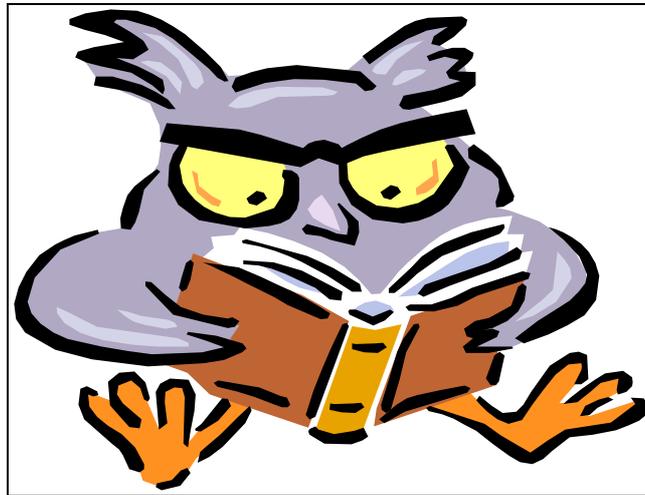
**Key words:** Information technology, survey education, continuing professional development, and professional sustainability, strategic alliances, globalization of education, stakeholders, strengths, weaknesses, opportunities, threats.

## SUMMARY

For almost a decade now Fiji surveyors have been struggling to devise plans and gather support from all sectors on the local scene in order to establish an education program so that new surveyors can be recruited into the profession and contribute to the continuing professional development (CPD). The past years have seen the Department of Lands and Survey exhaust all avenues in trying to establish such a course. The major problems that have always been there still remain namely the costs in acquiring new technology, funds that would need to be secured and the expert personnel to be engaged. The tertiary institutions have declared the establishment of such a program as not viable and cost prohibitive and this has led to the Department of Lands and Survey trying to establish the course itself. The aim is to provide a course that takes into account the CPD principles into the education program so that the new generation of surveyors are not only professionally educated for registration but also have an interest in the life long learning processes as professionals. It is also important to get recognition from local education authorities as well as international acknowledgement of this program. If the present challenges are not overcome through the support of local and international community of surveyors, the very existence of local survey professionals in Fiji will be threatened. Awareness of the strengths and opportunities need to be created in order to beat the potential threats and weaknesses that are always present in the professional environment. The key players in the rapidly changing surveying world are the costs in growing technology and the funding required to firmly establishing the education program. Strategic alliances and stakeholder relationships become crucial in gathering support for a big project that Fiji is attempting to launch. For a developing island nation this is a brave step forward for locals to create their own future to meet local needs and one that should be applauded and supported through to its implementation by one and all.

# Surveying Challenges in the Fiji Islands

Angina S. PRASAD, Fiji



## ABSTRACT

While the rest of the surveying world takes for granted survey education and Continuing Professional Development (CPD), it is not the same for many developing South Pacific nations. This is also the case in Fiji where professionals struggle to maintain their standards and the lack of an education system makes matters worse. This lack in education has seen a decline in the number of professionals in Fiji and the local tertiary institutions have nullified any chance of establishing a program, as the options not viable. As a result other attempts have been made by the community of surveyors in Fiji to establish a program that can be successfully implemented as well as provide continuous support for lifelong learning that promotes individualized learning and is provider driven.

This paper explores the potential for establishing an education program in the Fiji Islands that provides for the professional development in all aspects of the surveying profession as well as empowering individuals to strive for higher achievements in the profession.

## 1. INTRODUCTION

In the last twenty or so years the role of surveyors has changed to a much more information technology based role. In some scenarios surveyors have adapted almost overnight to the changes in the profession wrought by the rapid changes in survey technology namely the development of a number of generations of GPS receivers, new self tracking and reflector less EDMs and numerous advances in the capabilities of PCs and PC software (Hannah, 2000). These changes have allowed the surveyor to reach a higher level of competency and achieve competitiveness in the business environment. Thus the evolved surveyor is technology conscious, a consciousness that had been developed through professional education and changes in the work environment. In Fiji it is a very important challenge to keep up with the technological changes if an education system is to be established at any

time. The challenges have become a hindrance to the progress of survey education in Fiji. However, it is the very challenges that need to be overcome to proceed. There are the other challenges namely funding, access to resources and expert personnel to train the students to a professional surveyor level.

Today's modern surveyor without doubt is more hi-tech and much more than just a field person. However, we forget the fact that amidst a world of technology and advancement, there exists another world where professionals have to utilize what they can afford and access. There are professionals who make a conscious decision to forge ahead and access technologies while others do not appreciate changes for fear of the unknown. There is yet another group of survey staff mainly technicians who are interested in the changes taking place in the work environment but cannot see the opportunities ahead through ignorance, which stems from lack of professional education. Recently there has been a noticeable shift from the adverse attitude to a more realistic approach regarding the education issue in Fiji and this bodes well for the professional future. It is imperative to sustain the profession in Fiji given the lack of a survey education program and the declining number of professional surveyors. For it is through education that the importance of lifelong learning can be recognized and practiced. In attempting to establish a survey program, Fiji has taken a bigger challenge of implementing a workable program that incorporates life long learning processes. The world has progressed from Industrial Age to Information Age but Fiji is still in transition. In the industrial age education was provider driven that is, there was a set time of learning. Information age is based on individual learning. Since Fiji is in transition the best practice would be to base its education and lifelong learning principles on it being provider driven as well as individualized learning. Fiji stands to gain from this model of learning, as it will contribute to a renewal of interest among students as well as professional surveyors in sustaining and upgrading professionalism in Fiji.

Previously interaction between the Government and the private surveyors of the Fiji Institute of Surveyors (FIS) has led to a renewed spirit towards the education program and the enthusiasm is high in all sectors of surveying to see the education project implemented successfully. The public and private sector surveyors are working together to see the project through. The Lands and Survey Department has taken the responsibility to establish a Department of Lands & Survey run education program and the FIS has taken upon them to further improving the delivery of CPD as well as devise a plan for monitoring the progress of its members. In the past years FIS has had guest speakers from related professions speaking to its members. These have included GPS specialists from Australia and Trimble presentations, city planners, engineers and software training officers. This has generated the interest among the surveyors so much and it has been rewarding to see the support and demand for such gatherings.

Most elder generation surveyors are nearing retirement and in the absence of education to recruit new survey professionals, there will exist a void that will not be filled locally. As a result expatriates may need to be brought in if the education program is not implemented in the next three to four years.

With the local tertiary institutes nullifying the prospects of having a sustainable course for survey education at their establishments, the Director of Lands and Surveyor General has

taken the initiative to establish a education program for technicians as well as new students so that they can obtain a level of professionalism as well as knowledge about remote sensing, photogrammetry, GPS, professional ethics, project management, engineering etc. The aim of this is to enable the students to finish their projects and get registration status to possibly fill the void created by continuous brain drain. All surveyors want the success of the education program. There are however, skeptics who would rather wait for the results and have adopted a "Let's wait and see approach". Then there are those who do not like what the future without a survey education holds for them and are committed to changing it for the better. The response from the Fiji Institute of Surveyors as well as the survey technicians has been supportive as they see it as a step forward in their chosen field.

John Strong in his paper to 2<sup>nd</sup> Trans Tasman Surveyors Conference in 2000 identified one of the survey personalities as "The Purists", which aptly defines predominant attitudes of Fiji surveyors that is, the demand for retention of the present system, which needs revision. Purists also look to the government for protection rather than accepting the opportunities that are available. Only recently have the surveyors become realistic and opportunistic when it comes to education and life long learning.

The surveying community is now beginning to see the link between education and the importance of continuing professional development as it can bring about a change in the practical day-to-day activities in the professional life. While education adds academic qualification to ones life and generates interest in academic and professional life, it also drives an individual to carry that interest forward into their careers. The biggest challenge for Fiji is to implement a sustainable education program as well as to maintain the interest of the professionals in continuing professional development globally instead of them having a limited view and thinking in terms of Fiji only.

This paper will look at the challenges in establishing an education system in Fiji and how it facilitates the professional development in all aspects of the surveying profession as well as empowering individuals to strive for higher achievements in the profession.

## **2. HISTORY OF SURVEY EDUCATION IN FIJI**

First surveyors arrived in Fiji in 1873 with their jiggers and Gunthers chain (Lenz, 2002). The requirement in that era was to be a practicing surveyor in United Kingdom, Australia or New Zealand. A cadet system to recruit locals as surveyors was begun in the 1940s and was continued to the early 1980s. This is the longest running highly successful program ever run in Fiji. The cadet system produced competent local surveyors and most surveyors in Fiji today are a product of this cadet system. The 1980s saw rapid developments in the surveying industry worldwide and Fiji could not sustain the education system with fast growing technology. The Survey Registration Board (SRB) decided that the cadet system be abandoned in order to send students on overseas scholarships so that they receive their training in the changing environment. This worked very well for a few years but the problems soon became clear. The awarding of scholarships was irregular, graduates who returned to serve the Fiji Government soon left the country due to various frustrations with the system as well as to seek greener pastures overseas. The political upheavals of 1987 and 2000 contributed to these problems and scholarships were put on hold indefinitely and mass brain

drain of qualified individuals including surveyors occurred. In order to sustain the profession, Department of Lands & Survey exhausted all avenues to start a school of surveying in Fiji. Having failed, it is now looking at establishing a program run by the Lands & Survey Department.

One advantage for the cadet system was that it was taught in a generation where change was gradual and allowed relatively long periods for adaptation. This is no longer the case today and the Lands Department in Fiji is kept on its toes in attempting to implement a system, which utilizes modern technology, as well as imparting to students a level of professionalism by including papers such as Professional Studies and Photogrammetry, Remote Sensing, GIS etc. Where the education challenges have broken the spirit of many surveyors, it is heartening to see a positive attitude emerging towards the education cause in Fiji.

### **3. PRESENT STATUS OF EDUCATION**

There are no courses specific for surveying staff in the private and public sector and the past attempts have all failed to generate enough response or funds to get the show on the road so to speak. There is urgency now from the office of the Director of Lands and Surveyor General to get this project off the shelf.

#### **3.1 Revival of the Education Issue**

Early in 2002 a Survey Technical Committee was formed to examine the regulations for revision and to work towards generating a syllabus to implement in the education program for surveying. An education subcommittee was formed and a syllabus was proposed based on the modern surveyor needs. The technical committee and the FIS then scrutinized the syllabus and made recommendations to the education subcommittee. After discussions and consultation with stakeholder groups a final syllabus was prepared and put forward to the Minister of Lands for his approval to get the project to start. The project was given the Minister's approval and the next step is the Ministry of Education and Public Service Commission. For a while there was no feedback about the project and this was a set back for those involved in the project as there is nothing that could be done until the go ahead came from the Minister's office. There is so much to do including the hiring of a training officer who might be brought in from New Zealand or Australia. The assignments need to be prepared, the candidates need to be considered and timetables and materials etc need to be resourced.

It is important that recognition from the Ministry of Education is obtained as well as support for the program from overseas universities and those things need to be sorted out now that the Minister comments are given back to the Director of Lands and Surveyor General.

#### **3.2 Future Projections**

When the Technical Committee was formed in 2002, the enthusiasm was high and it was projected that the basic papers would begin to be taught in the second semester of 2003. This projection was realistic at the time. What was not anticipated was the delay in getting feedback from various stakeholders. Due to this unforeseen circumstance it is now expected

that the education project might begin by June of 2003. This prediction is not realistic as there is a lot of technicalities to get out of the way before students can be recruited and a classroom situation occurs.

The most ambitious expectation is that the project would run smoothly upon implementation once the training officer is in charge. The personal projection of the author is 2005 at the most for the education program to begin. In the meantime a lot of hard work needs to be put into the project by those who are directly involved.

On action plans of surveyors John Strong put forward a statement "*Surveyors are good at ideas but lousy at implementation*". Well, it is definitely what the Fiji surveyors are trying to avoid. The idea to establish a local education system has been around for the past decade and it is only now that implementation is being looked at seriously. If all the plans are followed then the above mentioned may not hold true for surveyors in Fiji.

#### **4. INFLUENCE OF EDUCATION OR THE LACK OF ON LIFE-LONG LEARNING (CPD)**

The educational requirements of today are dependent on the changing professional environment (Osborn, 2000). Hence it is very important to establish an education program for students that take into account the need for continuing professional development in the daily activities of a professional. In Fiji the lack of an education system and the relaxed attitude towards CPD has made the establishment of a workable education system a much more difficult task. Fiji Institute of Surveyors (FIS) have worked very hard in providing access to CPD for its members through discussions with other professionals such as city planners, engineers etc and providing articles relating to changes in the professional environment. The next step is to set up a system through which the CPD of an individual can be monitored.

At the moment the survey technicians do not see the bigger picture in the sense that they do not see themselves as being part of the world and so their views are restricted to their immediate surroundings. It is hoped that education will introduce a whole new perspective for these students and help them to see the bigger picture and pursue their interests by cultivating knowledge they obtain from journal articles and other academic papers. Education can start laying the foundations of CPD for these young people who will be researching their assignments and projects and therefore open their minds to a higher level of professionalism. At the moment, the survey technicians' career is wrapped up with the fact of going to the field and coming back to generate and lodge plans. There is basically no contact with clients or communication with the public. The implementation of education is seen as a tool that will encourage the students as well as educators to keep up with the continuing professional development. It is well and good to know that CPD has become a daily part of a professional life but without education it is hard to maintain CPD in developing nations like Fiji. A survey education course would ensure that all those who are involved in it maintain CPD and soon it will be the benchmark for all surveyors.

Department of Lands and Survey has taken up the education challenge and Fiji Institute of Surveyors has taken the task of monitoring the life long learning process and it is up to the individuals to realize that the two are prerequisites to each other.

## 5. MAJOR CHALLENGES IN IMPLEMENTATION OF EDUCATION

The education challenge is the biggest challenge faced by the surveying community and it is as much dependent on finance as acquiring new technology. It is also dependent on how technical the course would be and how to design and structure it so it serves Fiji needs entirely.

The two most important challenges identified are the following:

### a) *Adapting to New Technologies*

Lack of adaptability to new technology has hindered the progress of education for too long. In the first instance the technology should be acquired and time invested in training personnel to be proficient.

To achieve the new technological status finance needs to be secured. It is expected that the Fiji Government will meet some costs while some would possibly be funded through international aid. Department of Lands & Survey realizes that while the costs of updating to new technology is high, the costs of not doing so are higher and spell doom for the profession. Overcoming this challenge will result in successful production of a new generation of technology conscious, computer literate surveyors who would be well aware of the importance of maintaining the life long process of continuous professional development and thus will strive to achieve higher goals in their careers.

### b) *Academic Versus Professional Expectations*

When implementing the education program, it is important to know what needs are being met, that is, is the education program trying to produce students with high research skills or practical skills that is in balance with professional skills? While the pursuit of academia lies with the individual, it is important to serve the purpose of the society when establishing the level of knowledge required in making this program work. Fiji is interested in educating students so they have professional expertise instead of having a high level of research ability. Therefore a professional with good practical skills is going to be much more valuable to Fiji in the long run. However, there are questions being asked as to how much educating is too much for Fiji. Should the program focus on mathematical aspects or cadastral and land tenure or engineering design or information technology or land development? (Hannah, 2000) Answering these questions correctly will define the role of a surveyor in Fiji for decades to come.

## 6. STRATEGIES FOR PROFESSIONAL SURVIVAL

To ensure professional survival, Fiji is considering four different survival strategies. These include improving and forming powerful relationship with stakeholders of survey education, increasing survey profile in the country through marketing the career, developing non-traditional sources of funding and developing strategic alliances.

### 6.1 Relationship with Stakeholders

Already the Lands & Survey Department is building bridges with the Fiji Institute of Surveyors, the private surveyors and organizations overseas. This is especially beneficial as

the stakeholder groups can be used to facilitate the process and gain support for new initiatives. Cultivating a good relationship with stakeholders will encourage continued communication as well as consultation across various professions about issues that need cooperation and reinforcement, for example the education issue. Through consultation the stakeholders will prepare strategies for marketing the career as well as scouting non – traditional sources of funding. The communication link that is established through having good stakeholder relationships will no doubt maintain professional survival in the country.

## **6.2 Marketing the Career**

Surveying keeps low public profile and thus impacts directly on the school leaver as they contemplate their future. People generally are not aware of the opportunities in the surveying profession. Fiji has now decided to do presentations at high schools and at careers expo in order to generate interest in the young population. The present lack of demand arises from the fact that few students know what a surveyor really does. The general idea is that a surveyor only works in the field and does not know much more than that. Surveying is a skillful profession and the right kind of marketing will help the image of the profession. Private surveyors have shown interest in employing high school students as chain persons over school holidays and opening up their minds about the profession.

## **6.3 Non–Traditional Sources of Funding**

In the past the Government of Fiji has been the sole source of funding for any initiatives undertaken by the Department of Lands and survey. Now might be a good time to seek additional source of funding. Seeking funds from an international body like FIG might be an option as well as seeking aid from suppliers of survey technology. Foreign aid particularly from Australia and New Zealand has always been appreciated in the past and will continue to be appreciated. The more exposure this project gets the more the chance of getting aid to implement this program. Education usually comes with a high price tag that students in Fiji cannot afford. A local program designed to serve the needs of Fiji is the best opportunity for students to begin their career and be able afford it at the same time.

## **6.4 Strategic Alliances**

Instead of trying to include all papers in the program it is best to teach fundamental papers in the course and get students to take other relevant papers already established the University of the South Pacific. For example papers like engineering, computer, Geographical Information Systems papers (GIS) which are already being offered by this institution. This will act as a support to the education program and provide the modern surveyor with the skills to interact intelligently with engineers, lawyers, planners, valuers, environmentalists, architects and others who have an interest in the land. This is why developing strategic alliances by including papers from other professions is far more valuable than realized.

## **7. ANALYSIS OF SURVEYING FUTURE IN FIJI**

Surveyors in Fiji have a very enthusiastic view towards the education cause but a realistic view is also required. At the moment the surveying community is focused on making the

education drive a successful one, as there is no other option available to sustain the profession. It is important therefore to look at the future of education in Fiji with an analytic mind and take the strengths with the weaknesses and opportunities with the threats.

## **7.1 Strengths against Weaknesses**

There are strengths in establishing the education program and weaknesses of not having a well-organized program.

### **7.1.1 Strengths**

- Local education program will help in educating locals and encourage the pursuit of knowledge. This will encourage young people in Fiji to choose surveying as a profession that will provide specialist skills as well as a rewarding career in the longer run.
- An education program will create career opportunities within the public and private sector of surveying. Through this program students will be encouraged to work towards their registration and advance further through promotions and other education endeavors.
- It will also encourage professional development of the individual through creating interest in continuing professional development. This will mark them as true professionals who are faithful in continuing their pursuit for education for life.
- The program will also contribute to the sustainability of professionals. The continuous brain drain has put enormous pressure on the profession to have competent surveyors. Successful implementation will work towards solving the problem.
- The profile of the profession will be raised and the demand for the profession will grow.
- In the longer run, the Pacific region may take advantage of a well-established education program for surveyors. This will raise the profile of the professional surveying course in the South Pacific.
- At the moment survey technicians see themselves in a dead end position where there are few scholarships available and many have pursued other courses at tertiary level and changed their profession. If however, the education proposal goes through then this problem will be overcome and survey technicians will see themselves in a strong position of advancing further within surveying in Fiji.
- Continuing with new technologies will make it a dynamic course where changes in the work environment will be absorbed by the education system. As a result it will never be out dated and will continue to serve Fiji's professional needs for decades to come.

### **7.1.2 Weaknesses**

- The consequences of not having a well-organized education program will result in a lot of dissatisfaction from everyone in the community.
- Dissatisfaction among students will contribute to further decline in survey professional instead of helping the situation. Dissatisfaction is likely to push people into changing professions by enrolling into other programs at tertiary level.
- If there are not enough surveyors to do the jobs then it is very likely that those jobs will be taken by other professional such as engineers, planners etc. and that will surely result in the demise of the profession as a whole. Once this trend is started it will mean spending

to get expatriates in Fiji who can fill the void in the profession. This tends to disadvantage the prospects for locals.

- Poor quality of the program will result in poor communication skills and therefore not a good image for professionals to have in this day and age. In addition to this, the students will continue to be ignorant to a certain degree and there will be a noticeable decline in professional standards, which will lead to a decline in professional development.

## **7.2 Opportunities against Threats**

This is a world of opportunities that are waiting to be seized. The ability to realize them as such is the mark of a professional individual who is conscious of the environment he/she operates in. However, there are threats that exist especially in the task undertaken by the Lands and Survey Department of Fiji. It is in overcoming the threats that the opportunities become clear and this remains true for Fiji.

### 7.2.1 Opportunities

- Those who are recruited by the program will be taking their first steps towards induction into the surveying profession and will have the opportunity to make a name for themselves in the career of their choice.
- As a surveyor the doors of opportunity will be opened for further academic achievement and professional recognition.
- There is the opportunity to create alliances with others and seize opportunities that might present be presented.
- There is the goal to work towards registration in order to be professionally recognized and to qualify for promotions.
- Embracing new technologies and accepting change will result in expanding of a surveyor's role in society, which may lead to personal achievements.
- Another opportunity to emerge will be the ability to promote unique abilities to the public as a surveyor that is, producing quality and efficient work that is timely.
- Students who complete the course successfully can then take the opportunity to begin their own survey practice as registered surveyors. By doing this not only will they be expanding their future but will be actively creating it.
- There are many other opportunities that might be available for an individual in different situations. The fact of the matter is that it is only through education that these opportunities become accessible. Therefore the education program is a great incentive to all for the future.

### 7.2.2 Threats

- Affordability of the course could be a hindrance for students therefore creating a barrier for potential surveyors. This is why it is important to manage the program in such a way that locals find it affordable. A professional surveyor needs to claim back from other professionals the jobs traditionally done by surveyors.
- With the introduction of a local program a gap will be created between overseas graduates and local students in terms of qualifications. The position of the locally qualified individuals needs to be clearly defined.

- For an education program to succeed the costs would be high in setting it up. The high costs also are a threat and could result in working within an unrealistic budget. If this is the case then the goals of the program will not be achieved and the affected parties will not be entirely successful in teaching all the requirements. The issue of costs is such that single handedly, it can lead to the collapse of the whole program. To prevent this from happening, the action plans and costing needs to be done with extreme discretion and proceed further when the all the funds needed are secured.

The above-mentioned threats in the absence of an education program should not be taken lightly. Surveying profession in Fiji is approaching the edge of the cliff quite quickly and it is imperative that the international surveying community comes to their rescue in the name of brotherhood and sisterhood. A developing nation like Fiji cannot walk the lonesome walk towards education without support unless there is commitment locally and internationally.

Analysis using strengths, weaknesses, opportunities and threats is an effective way of determining the issues that need to be tackled and the problems that could be anticipated in the future. It helps to see both sides of the same coin and possibly take counteractive actions. In order to establish an education program in Fiji it is not enough that the challenges are identified and met but it is also to realistically look at the state of the business of establishing such a program.

## **8. CONCLUSION**

Fiji cannot afford to relax about the education issue any more. The need for action is now and the opportunity should not be lost. The enthusiasm is high in all sectors of surveying with a few skeptics as usual but the heartening thing is that education has been given priority status and all involved are focused on this project. The foundation lies in assertive action and positive attitudes. All agree that it is their time to give back to the profession and build a new generation of surveyors.

The environment in which a professional works today is consistently changing. These changes have contributed to the development of education and CPD principles. Therefore the education program being in considered in Fiji will most definitely take the best route by adopting the changes. CPD practices and incorporates the principles in the formation of [any education] program (Osborn, 2000). After all globalization of education is a fact of this world and if Fiji is to train modern surveyors then the principles of globalization of education must be adhered to that is, the CPD principles must become a necessity.

Sustainability of survey training lies in the relationship between the professional and educational facilities. At present this relationship is gaining momentum through strong interaction between various groups to maintain a level of interest. A proactive attitude is needed to bring change in future work and educational environment. Also the need to rely on the government for all needs has to be shifted and other sources for resources needs to be considered.

As mentioned throughout this paper it is the challenges of funding and new technologies that need to be addressed first and foremost. It is important to secure the resources needed before

launching the education project. Level of recognition for the project outside of Fiji also needs to be considered in order to give credibility to the project.

Overall the project has a lot of potential for locals and the profession in Fiji. It needs to be supported though for successful completion through international aid and expertise. Getting this project going will be a great achievement for the surveying community in Fiji, in the South Pacific and will do all the surveyors in the world proud. It is a great challenge for a small South Pacific Island nation but a brave step to try to save the future of the survey profession in Fiji.

As a result, it is the author's view that education in Fiji should be a combined effort from all members of the profession locally as well as globally. This will result in the establishment of a program that is of a high standard and satisfies local needs of this South Pacific Island nation.

## REFERENCES

- Bevin, T, 2000, The Future of Surveying has Arrived, New Zealand Surveyor, No. 290, page 2, Dunedin, John McIndoe Ltd.
- Grenfell, R et al., 2000, Sustainability of Surveying Education: A Case Study of the Surveying Degree at RMIT University, 2<sup>nd</sup> Trans Tasman Surveyors Conference (Proceedings), pages 55-57, Queenstown.
- Hannah, J, 2000, The Challenges Facing Surveying Educators In the New Millennium, 2<sup>nd</sup> Trans Tasman Surveyors Conference (Proceedings), pages 82-86, Queenstown.
- McKay, D, 2001, CPD and the New Institute, Survey Quarterly, Issue 27, pages 26-27, Dunedin, John McIndoe Ltd.
- Osborn, J, 2000, Lifelong Learning: Flexible Delivery and CPD, 2<sup>nd</sup> Trans Tasman Surveyors Conference (Proceedings), pages 14-16, Queenstown.
- Phillips, D, 2000, The Sustainability of Survey Technician Training, 2<sup>nd</sup> Trans Tasman Surveyors Conference (Proceedings), pages 91-92, Queenstown.
- Strong, J, 2000, The Challenge of Sustainability for a Professional Consulting Survey Practice, 2<sup>nd</sup> Trans Tasman Surveyors Conference (Proceedings), pages 204-206, Queenstown.
- Wallington, D, 2002, Bye-bye baby boomers Now for generation X, Survey Quarterly, Issue 32, pages 31-33, Dunedin, John McIndoe Ltd.

## **ACKNOWLEDGEMENTS**

The author would like to thank Mr. David Greenwood, Mr. Michael Lenz, Mr. Mesake Senibulu and Mr. Barma Nand for their support and advice.

## **BIOGRAPHICAL NOTES**

The author has a Bachelor of Surveying Degree from the University of Otago, New Zealand. She has worked for the EDS (NZ) Limited on the land online project in Wellington after graduation. She is currently employed in Fiji at the Department of Lands and Survey as a survey graduate and is working towards getting her registration as a surveyor. The author is an Associate member of the New Zealand Institute of Surveyors Inc and a Probationary member of the Fiji Institute of Surveyors. She has been actively involved in the education status in Fiji as a member of the education subcommittee and continues to take an interest in the continuing professional development as an individual.

## **CONTACTS**

Angina S. Prasad  
Ministry of Lands and Mineral Resources  
c/o Department of Lands and Surveys  
Divisional Surveyor Central Eastern  
P. O. Box 2222,  
Government Buildings,  
Suva  
FIJI  
Tel. + 679 3312 441 (work)  
+ 679 3315 836 (work)  
+ 679 9272841 (A/H)  
Email: [anginaprasad@hotmail.com](mailto:anginaprasad@hotmail.com)