

**E-GOVERNMENT IN THE SOUTH PACIFIC REGION:  
CASE STUDIES FROM FIJI AND SOLOMON ISLANDS**

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## **ACRONYMS**

ITCSU Information Technology & Computing Services Unit of Fiji Government

# **E-GOVERNMENT IN THE SOUTH PACIFIC: THE CASE STUDIES FROM FIJI AND SOLOMON ISLANDS**

## **1.0 Introduction**

This paper examines the issue of e-government in the South Pacific Region with case studies from Fiji and Solomon Islands. In particular, the paper will examine the origins of e-government in Fiji, current status of e-government, whether it involves the poor, the Fiji's e-government strategic plan, its constraints and finally suggest some solutions to overcome the obstacles.

The right to information offers a practical means for public (especially the poor and most vulnerable groups) civil society and other stakeholders to engage more effectively in human security and sustainable development activities and ensure that their rights, interests and aspirations are protected and enhanced. E-government and e-governance are two mechanisms to achieve this (World Bank (2001)). In our information society, customers increasingly expect government to be accessible and convenient. E-government is defined as carrying out of government business transactions electronically, usually over the Internet, but including all the related real-world processes. Whilst in terms of scope, E-Government facilitates access to far greater range of services and products, in terms of scale, E-Government can enable the involvement of the marginalised groups and individuals.

At the outset, it must be stressed that ICT is only one way to reduce poverty and help the poor. It is one of the tools among others approaches to reduce poverty. Having acknowledged that, the paper argues that ICT could be used to reduce poverty and help the marginalised sectors of our society. The tool of ICT should be integrated in government's effort to address poverty. Other tools such as tele-centres, SMS, etc could also be used.

## **2.0 Main means of Communication in Fiji.**

Traditionally in Fiji, the radio, newspaper and television have been the three main ICT mechanisms through which government and NGOs have been communicating with its people. There are fifteen different radio programmes, of which five are broadcasting in English, five in indigenous Fijian language and five in Hindi language. The government frequently uses them to inform people about government activities, etc.

There are two main newspapers and these are published in English and they are published daily. and In addition, there is one newspaper in indigenous Fijian language and one in Hindi language and they are published weekly. The vernacular papers are popular among the rural dwellers because most of them do not have English literacy.

Over the two last decades, the television has become more accessible in Fiji. The government (via the Ministry of Communication and Information) uses television to disseminate information to the public about its activities, projects and its policies every week. For example, the Ministry of Communication and Information runs TV programme every Sunday in Fijian and Hindi languages to disseminate information on what Fiji government activities for the week. However, the limitation is that these programmes are non-interactive and the information given is mainly pro-government rather than an independent critical analysis of government activities. It must be stressed that in Fiji, access to TV in rural areas has dramatically increased in the two last decades due the 'craziness of the sports of Rugby and Football'. Fiji is the current world champion and six times champion of the 'Hong Kong Sevens Rugby' and one time champion of the International Rugby Series. Even in remote islands where there is

no electricity, there is at least one TV in each village and small electricity generators operate the TVs. During the Rugby and Football sessions, rural villages flock to urban centres to buy TVs and electricity generators.

### **3.0 Origins and Current Status of E-Government in Fiji**

From the outset it must be stressed that vis-à-vis Asian countries, e-government in Fiji has a recent history and hence is in its very infant stage. Only a few years back, in 2003, the Fiji government had announced that it would introduce e-government service and is slowly progressing in this direction. There is a lot of work to be done before the e-government project in Fiji comes any closer to what exists in Asian countries.

#### **3.1 Why has e-government not 'taken off' in Fiji and other South Pacific Island Countries?**

The major reasons are threefold. First is the lack of development of infrastructure in rural areas particularly access to electricity and telephones. Second is the remoteness of small islands. Third is the lack of funds to develop e-government. Fourth is the lack of senior computer skilled people. Fifth is that e-government is not a top priority for the government such as health, education, roads, electricity and telephones.

#### **3.3 Debate surrounding the issues of 'bad- governance', 'good- governance', and 'e-government' in Fiji?**

Some people (both in Academia and Politics) in Fiji have argued that the government is reluctant to develop *interactive e-govt services* because it wants to 'keep people in the dark' and also not expose it's 'bad-governance'. This issue has also been debated in Asia. In Asian countries where there is existence of 'bad- governance', there is a debate as to whether we need to attain 'good governance' first before starting the project of 'e-govt' or develop the 'e-govt' project despite the fact of existence of 'bad- governance'? This paper takes the position that 'e-govt' project should be embarked upon even in countries where there is 'bad- governance' and further argues that in fact 'e-govt' project would be an useful means by which public can voice their opinion and assist change 'bad- governance' into 'good- governance'.

#### **3.3 What E-Government Services are available in Fiji?**

What the government has done so far? At present, the government has an official website through which it provides information on various government ministries and current news (see [www.fiji.gov.fj](http://www.fiji.gov.fj)). This website is hosted and maintained by the Ministry of Communications and Information. The main driver of e-government applications in Fiji is the 'Information Technology & Computing Services Unit' (ITCSU) based under the Ministry of Communications (see [www.itc.gov.fj](http://www.itc.gov.fj)). The government site includes official press releases and links to government agencies with their own web site. So far 12 out of 25 ministries have their own websites. In addition, the Fiji Parliament has it's own website ([www.parliament.gov.fj/main/index.aspx](http://www.parliament.gov.fj/main/index.aspx)).

In addition, the government has managed to put some official documents (forms) online which public can download and print. For example, the 'Fiji Immigration Department' website allows people to access and print passport applications forms. Another example is the 'Fiji Land Transport Authority' website enables people to access and print form relating to motor vehicle issues such as drivers license, etc. However, at present, public are restricted only to download and print forms. They are not able to pay for the services online and complete all transactions. But, the good news is that the government

has announced that its first pilot e-government project will be the further development of the Immigration Department website (ITCSU Document, 2006). Hopefully, this development will allow customers to apply, pay for and receive immigration services online. This will be similar to existing private sector banking services provided by the Australia New Zealand (ANZ) bank for its customers to pay their utility bills (electricity, water and telephone) via internet banking services.

One of its most successful projects developed by the Information Technology & Computing Services Unit was the computerization of the 2001 elections, facilitating registration and verification of voters. This web site allowed voters to check their electoral details were correct. While this proved useful during the pre-election period, the website generated a number of privacy issues and as a result it has since been brought offline. As a result of this, the May 2006 election was not put on line. The government is still working on a system that will solve the privacy issue and plans to introduce the service back again when the confidentiality issue is resolved.

#### **4.0 What's in the Pipeline: Fiji Government's future Plan**

The Information Technology & Computing Services Unit is also currently in the process of developing the so-called "People Online" project which will provide public access to the following three e-government services:

##### **3.1 Contacting all public libraries in Fiji to the Internet.**

First, the Fiji government plans to connect all 19 public libraries to the Internet. This is specifically aimed to help students that do not have access to the Internet through their educational institution. Not all schools in Fiji, particularly those in rural area students have access to computers and Internet.

##### **3.2 Establish rural 'telecenters'.**

Second, the Fiji government plans to establish rural 'telecenters'. In 2005, a pilot project that was carried out in the village of Verata in the main island of Viti Levu showed that a computer with dial-up access was of great interest to people, particularly high school students. The centre was so popular that school children from other villages were prepared to walk for an hour just to be able to use the Internet for their assignments. However, the usage by adult people was low because of illiteracy and the lack of awareness of the benefits of Internet. The adult rural people are more interested in knowing what issues are debated in parliament, which they can get via live television broadcast done by Fiji TV.

Although the Fiji government wants to introduce rural 'telecentre', it has not conducted any cost benefit feasibility study to analysis the economic viability of such telecentres. Evidence from other countries (such as India) show that there are only few users of Internet. Similarly, the evidence from the case study of PFnet<sup>1</sup> in the Solomon Islands show that there are less takers for Internet because of the lack of demand, the slowness of the service and the costs associated with it. The cost of establishing and operating the telecentres will be high. The government plans to transform these telecentres into a private business type project to become self-sustainable. It is suggested that Fiji government should consider the option of opening up at least a few 'common service centres' *vis-à-vis* telecentres in the two large islands (Viti and Vanua Levu) to deliver its services on-line.

##### **3.3 Establish "Supercentres" in Urban Areas.**

Third, the Fiji government plans to establish "Supercentres" to assist poor in urban areas who cannot afford to use Internet cafes. These one-stop e-government centres would provide access only to government sites, and allow public to complete forms online. The idea is to charge a small fee to

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<sup>1</sup> PFnet case study is examined in detail later in this paper.

make the project sustainable, but it will reduce usage. Another constraint is that this project will only become viable once a number of significant government applications are online.

### **3.4 Funding to Develop E- government in Fiji.**

To further develop the E-government, the Fiji government is planning to borrow \$20 million as a loan from the government of People's Republic of China through the China Exim Bank. The Fiji/Chinese E-Government project will be implemented over the next 5 years and Fiji has developed a strategic plan to in this regard. In 2005, Fiji adopted a National Information Communications and Technology Policy and is based on three platforms for development, that is E-Government, E-Commerce and E-Community.

In a Parliamentary speech, the Finance Minister of Fiji, Ratu Jone Kubuabola argued that the:

"Fiji/Chinese E-Government project at the broadest level is to help improve Government functionality, thereby enabling better policy outcomes, improved and more efficient delivery of services and greater interaction with citizens." (Hansad report, Dec 1 2005).

He further mentioned that:

"The E-Government project will put Government business on-line, (E-Government) and also make some strategic linkages with the community (E-Community), hopefully empowering communities to access Government services provided on-line. It will also assist business to directly access Government services available on-line" (Hansad report, Dec 1 2005).

The project also involves the generation of E-Government roadmap, strategic plan, its implementation phase and related governance and management aspects. It will also address the human resource programme, skilling and competency development. On the E-Government Strategic Blueprint, the Finance Minister mentioned that:

"This will involve the planning for long term strategic development of E-Government in the country and includes the formulation of the E-Government Blueprint vision and its related mission, goals and objectives" (Hansad report, Dec 1 2005).

The Finance Minister further elaborated that the E-Government project will have five components and they are: E-Government Blueprint; E-Government Applications; Government Data Centres; Government Info-Communication Infrastructure and ICT Competency Development and Training.

He further mentioned that the E-Government Applications comprise the technical functions of the overall IT architecture upon which, eight E-Government applications will be based and these applications are: E-Learning for teachers and students in rural areas, E-scholarship System, Prison Administration System, Crime Database, E-Social Welfare System, Document Management System, Customs Authority Computerisation and Human Resource System.

## **4.0 Analysis and Evaluation of E-Government Project in Fiji**

This section of the paper analyses and critically evaluates E-Government in Fiji.

#### **4.1 Only benefits middle and upper class in Fiji**

E-Government services in Fiji are only accessible by middle and upper class people who can afford a computer and Internet services. Obviously only those people who have access to computer and Internet facilities can browse through this web site. Poor people in urban areas and those in rural areas do not have access to this website. There is little effort to address the needs of poor in urban areas and marginalized rural people who do not have access to a computer and Internet.

Furthermore, the website is not fully developed and only provides very limited information. E-Government is limited to computerization of government information, access to selected information online, and availability of government forms online. For example, government ministries just have a page or two and there are no other additional website links to provide more detailed information.

#### **4.2 Pre-dominantly aimed at promoting business sector**

It appears from the speech of the Finance Minister that one of the main motives behind this project is to promote e-commerce rather than assisting the grass-root marginalised people especially those in the rural areas. To quote, the Finance Minister revealed:

“Fiji stands to gain through this investment, in terms of application, which can create new markets and products. It will promote investment in the Fiji and will include its support to leadership and development, contribution to improved productivity and economic growth. It will also effectively lower the cost of capital investment per worker, thereby freeing resources that can be utilized elsewhere and increasing productivity.”

It appears that the E-Government project in Fiji will pre-dominantly provide service delivery for business sector. For example, Fiji government is planning to put for example ‘Fiji Inland Revenue and Customs Authority (FIRCA) services online so that government forms can be down loaded from the internet. Whilst this is good for business people, it has limited impact marginalised poor in urban areas and particularly those in rural areas who do not even have access to Internet let alone a computer.

#### **4.3 Lack of participatory planning and development in Fiji**

One of the reasons for failure of sustainable development in Fiji has been because of the ‘public kept in the dark’. Like in most Pacific Island countries, in Fiji the development strategies for years have been designed and implemented in a ‘closed environment’ between the donors and government policy makers without full participation by the people. It is necessary for government to provide information to the public (especially those in rural areas), then people can assess for themselves why they have not benefited from government development strategies or even in basic service-delivery such as education and health. By having readily available information, the citizens are in a better position to effectively evaluate and lobby government so that they community-specific needs are met and that government funds are used properly.

#### **4.4 Non-Interactive Service**

At present, the Fiji government website does not provide any *interactive* applications but is limited to *static* websites providing text based information and the downloading of documents.

#### **4.5 Citizen’s Right to Information**

In a recently released report, the Pacific Media and Communication Facility has analysed the status of ‘right to information’ in the Pacific Region. The Constitution of Fiji explicitly mentions the government to pass legislation on ‘freedom of information’, but so far nothing has been done to enact such an act. Since ICT in Fiji has enormous potential-if utilised effectively- it is imperative that ICTs

strategies are underpinned by the philosophy of citizens 'right to information' and 'participation' of all socio-economic group of people in society in order to contribute and enhance to transparency, accountability, good governance and human development. The 'right to information' has been recognised by the United Nations General Assembly as far back as 1946, when it declared, "*Freedom of Information is a fundamental human right and the touchstone for all freedoms to which the United Nations is consecrated*" (UN General Assembly Resolution 59 (1), 65<sup>th</sup> Plenary Meeting, 1946). Fiji government by entrenching the principals of 'right to information' and 'participation' in its ICT strategic plan can narrow the 'knowledge gap' between the government and its people. The 'right to information' obliges government to respond to questions raised by its citizens and requires government to be proactive in providing information to the people, rather than conducting its business in official secret.

#### **4.6 Not Promoting Democratic Governance**

True democracy is when citizens have accesses to information and are better informed about the politicians and political parties they are electing and also evaluating the activities of politicians while they are in govt. Democracy takes place when citizens meaningfully take part in activities of the various government institutions and keep them accountable of policy makers decisions, rather than listening to meaningless rhetoric of govt. In Fiji-as in most Pacific Island countries-since most people do not have access to correct information, voters normally use ethnic, cultural, traditional and religious factors when electing politicians to parliament. To complicate this since the coup of 1987 and especially after the coup of 2000, politicians and government in power are using public money to buy votes. For example, since Fiji will have a general election in May 2006, the present Qarase government is donating \$F200 (\$US120) as an 'education fund' to families. This is a disguised way of 'buying of voters' from the ethnic Fijian community,

### **5.0 Constraints for the Development of E-government**

There are constraints are both on supply and demand sides. These constraints are discussed below.

#### **5.1 Constraints on the Supply Side**

##### **5.1.1 Shortage of computers**

It is estimated that there are 20,000 PCs in use in Fiji (Data from Telecom Fiji, 2006). On average, this works to 1 PC for every 8 households. It must be noted that this is a very crude estimate and unfortunately there is no other source of data available. Of the 20,000 PCs around 1,500 are in use in government offices and another 2,000 are used at the University of the South Pacific.

As per household use, according to Telecom Fiji data, there are 6,500 households with PCs and this works out to 1 PC for every 27 families. The main reason for little use of E-government websites is that people cannot afford computers, let alone having access to Internet. Around 47% of all workers in Fiji earn less than \$F 6,500 (\$USD 3,250) and according to a UNDP report this is below the poverty line for the country. If the grass-root people are to benefit from Fiji's E-government Project, then computer penetration with government assistance needs to be increased.

### 5.1.2 Shortage of skilled ICT workers.

In 1986, Fiji had a registered IT personnel of 79 and this was 0.1% of the total formal employment. In 1997, according to Fiji Bureau of Statistics, the numbers increased to 620, comprising 0.54 of the total formal employment. This is shown in table 1.

**Table 1: Statistics on Information Technology Employees in Fiji Islands**

	1986	1987	1988	1993	1996	1997
<b>Professionals &amp; Technical Assoc. Prof</b>						
System Analyst	11	12	6	30		
Statistical & Mathematical Technicians	68	65	78	133		
<b>Professionals</b>						
Computer Systems Designers & Analyst					75	108
Computer Programmers					76	100
Other Computer Professionals					41	12
<b>Technical Assoc. Prof.</b>						
Supervisor, Computer Assoc. Prof.					29	19
Computer Assistances					49	56
Computer Equipment Operators					212	325
<b>Total IT Employees</b>	<b>79</b>	<b>77</b>	<b>84</b>	<b>163</b>	<b>482</b>	<b>620</b>
<b>Total Paid Employment</b>	<b>79,854</b>	<b>78,159</b>	<b>77,529</b>	<b>103,664</b>	<b>110,081</b>	<b>114,749</b>
<b>% Of Total Paid Employment</b>	<b>0.10%</b>	<b>0.11%</b>	<b>0.11%</b>	<b>0.15%</b>	<b>0.44%</b>	<b>0.54%</b>

Source: Bureau of Statistics 1986-1997 data

Although, the number of IT personnel has increased, unfortunately, every year Fiji loses a lot of IT personnel due political problems (2000 coup) and people seeking ‘greener pastures’ overseas, mainly to Australia and New Zealand. This problem of ‘brain-drain’ needs to be addressed. So far, the Fiji government has not undertaken measures to stop this trend. A study would be a first step to understanding the current situation. Fiji needs to know exactly how many ICT professionals it has and how many it needs. Since the USP is planning to carry out an ICT survey among businesses and the public sector, the government should use this opportunity to participate in the study. The data that is currently collected on Fiji's human resources (mainly by the Public Service Commission) need to be modified to include more specific information on ICT (as opposed to general categories, such as ‘engineering’ or ‘technology’). In order to alleviate current ICT labour shortages, the government should make work permits for ICT specialists easier to obtain. Take the example of developed counties that facilitate work procedures for foreign professionals because of the highly competitive international market for ICT skills. ICT brainpower is essential for the overall development of the country.

## 5.2 Constraints on the Demand Side

### 5.2.1 Affordability (Lack of money to use Internet)

The question that needs to be asked is whether e-government is helping the poor and reducing the gap between rich and poor or is it widening the gap further? Can poor people in the South Pacific afford to pay for ICT? The cost of using Internet in Fiji is relatively high. According to *Telecom Fiji*, there are approximately 3,500 Internet users in Fiji (Telecom Fiji Data, 2006). It is noteworthy, that the bulk of these users are from urban arrears who do not have to pay for Internet and they are mainly are staff and students of tertiary institutions such as the University of the South Pacific (USP), the University of Fiji (UF), Fiji Institute of Technology (FIT), Teacher Training institutions, government civil servants in government departments, international agencies and private sector firms. Hence, users of household's,

particularly by poor grass-root marginalised users is very small. In addition, the connection speed to Internet sites is slow which adds to the cost and also frustrates people to use such service.

### **5.2.2 Access to Internet Facilities.**

In remote rural areas, poor people do not have access to computers facilities and in cases where they have access, they do not have money to use it. Distance and the cost of travel to urban centres are also hindrance to use ICT services.

## **6.0 The Case study of PFnet ICT model in Solomon Islands: Lessons to be learnt.**

The Pacific Islands and other third world countries can learn a lot from the PFnet model which is currently practiced in Solomon Islands. It is an excellent ICT model, which other countries can replicate. Let me explain how the model works in Solomon Islands. Take the following scenario: there is a remote village named Sasamunga in the island of Choiseul approximately 1,000 miles away from Honiara, the capital the Solomon Islands. The village does not have electricity nor connected via telephone line. Five years ago, the only two means of communication to Honiara and the outside world was through letters, which took on average 3-4 weeks to reach Honiara (via local shipping) or by short wave radio connection used in emergency cases in cases of emergencies. But since 2001, the grass-root people in Sasamunga have been communicating to the government departments, families and friends in Honiara via email daily. One may ask how is this possible without electricity and telephone connection? The answer is through the introduction the PFnet system.

The PFNet communication system was established in 2001 as an UNDP-UNOPS project and was initially partly funded by UNDP. Over the years, major funding has come from Japan, NZODA, Britain, the Republic of China, AusAID and the EU. Currently it is self-sustained. The PFNet project is managed by an NGO named the Rural Development Volunteer Association (RDVA) and the main headquarters is the Internet Café in Honiara. There are currently fourteen email stations in Solomon Islands one in each of the main remote islands. Each email station was setup by an official of the Rural Development Volunteer Association (RDVA) and is housed in a small room, usually in a provincial health clinic, community school, or some other accessible and secure public facility.

### **6.1 How does the PFnet system work?**

Technologically the operation of the Pfnets system is very simple. The technical equipment consists of a laptop computer<sup>2</sup> which is used to type the email message and then the message is transmitted via a 'high frequency short-wave radio' which then transmits the email message to a 'bigger radio receiver' at the Internet Café in Honiara. An operator at the headquarters receives email messages and then forwards the emails to the relevant addresses several times in a day. Hence, there is constant link to and from between the operators at each of the rural email station and the operator at the headquarters in the Internet Café in Honiara.

The way an email message is sent and received at each email station operates as follows: a customer visits the email station and either brings the message either as a handwritten note on a piece of paper (usually in Pidgin language) or verbally dictates the message to the station operator who types the message and then sends it to the Internet Café in Honiara. Since the operators at each station perform the functions of typing and sending the messages on behalf of the customers, illiteracy in English is not a constraint for use of PFNet services.

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<sup>2</sup> The costs is around \$USD2,000 and it operated via solar power ( no electricity).

In the South Pacific Region, only Solomon Islands has established the PFNet scheme. It was set up on a trial basis so that, if successful, it could be replicated in other Pacific Island countries. In 2004, I was commissioned to evaluate the PFnet model and my research has shown that the PFnet model has been a success story. My report recommends that third world countries around the globe (including Asia-Pacific) could learn a great deal from the experience of the PFnet case study and replicate it in their own country in order to improve communication system to rural people and also make e-government benefit the poorer groups.

### **6.1 What lessons do we learn from the successful PFnet system?**

- The first lesson we learn is that in the current modern world the ‘tyranny of distance’ is not a barrier for communication for poor people living in remote rural areas.
- The second lesson to be learnt from the PFnet model is that it is based on ‘*community participatory planning system*’. It is based on a model that the ownership and decision making is left in the hands of the community (see appendix 1 and 2 for an example of a agreement between the Rural Development Volunteer Association (RDVA), village committee and an operator). This ‘*community participatory planning system*’ is important especially when the poor are involved in programmes that affects their life. The PFnet model is not only ‘participatory but also involves women and youths.
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- The third lesson to be learnt from the PFnet case is that it is ‘affordable’ by the rural people. The cost of sending an email message is \$S2.00 (\$USD 0.26 cents) and cost of receiving is \$S0.50 (\$USD 0.7 cents).
- The fourth lesson to be learnt from the PFnet case is that it provides efficient and quick information communication system. For example, it is very useful to discuss medical issues via email and it has saved lives of people.
- The fifth lesson to be learnt from the PFnet case is that has improved the literacy level of rural people who have not attended formal school education system. At least most people in villages know what ‘email’ stands for.
- The sixth lesson to be learnt from the PFnet case is that it has helped rural people to participate in small commercial activities, which was impossible before. In addition it has also enhanced existing larger fishing and seaweed businesses.
- The final lesson (but not the least) to be learnt from the PFnet case is that it can be used to ‘reconcile ethnic tensions and conflicts’ by providing unbiased objective information to people.

### **7.0 Recommendations: Possible Solutions to Promote E-Government in Fiji**

E-government in Fiji can pick up pace if the following things are addressed:

First, since both hardware and software of ICT are not affordable by most citizens in Fiji, ICT strategy has to be backed by government and international funding.

Second, due to the shortage of IT personnel, there is an urgent need to train and re-train people who

can provide expertise ITC Services to develop and enhance e-government applications.

Third, the speed of the network and the quality of services needs to be improved. The high cost for bandwidth is inhibiting Fiji government to develop its ICT programme.

Fourth, there is a need to improve the quality of GOVNET website. All government ministries and departments should be online and provide adequate information to the public so that they can fill and pay for it online. Also there is a need to standardize e-government services and applications.

Fifth, Fiji government should consider the option of opening up at least a few 'common service centres' *vis-à-vis* telecentres in the two large islands (Viti and Vanua Levu) to deliver its services on-line.

Six, the Pacific Island governments should use the University of the South Pacific (USP) as a centre of excellence for new ICT applications. In most developing nations, the tertiary education institutions have played a key role in the development and sustainability of ICT research and development. Further investment in USP's ICT programme would bring about good benefits to all Pacific Island governments. This includes more ICT courses and the formation of ICT experts, as well as the testing of new technologies and applications. As part of practical projects, students could help Pacific Island governments to develop applications. As an educational institution USP should either be allowed to provide its own Internet connection or get very low cost Internet access. This is in keeping with the situation in many other nations where the academic system has preferential access and pricing.

Seven, Fiji government should fully utilise the ICT visual and audio technology of television to disseminate government department information to its especially those in the rural areas. Fortunately, as mentioned earlier, since there is easy access to television in remote rural villages in Fiji, the government should use this existing infrastructure to communicate more with its people.

Finally, Fiji government should immediately take heed of the success story of the PFnet system in Solomon islands and without hesitations introduce such a system in Fiji. This will be cheaper and more efficient way rural people can communicate with government departments and other domestic and international organisations.

## **8.0 Conclusion**

ICT and E-government developments in Fiji are in infant stages and a lot of work has to be done in order for Fiji (and Pacific Island Countries) to catch up with the Asian countries. It is essential e-government in Fiji ought to build on public participatory and involve communities at the grass-root level through dialogue and consultation. There is a need for the Fiji government to respond to community aspirations and see poor as 'partners' of governance and not merely 'recipients' of state policies and service delivery systems. Therefore, e-government project should not 'exclude' the poor but should involve the empowerment of poor which in-turn should lead to participation whereby the poor and marginalized sections of society can participate in decisions, which affect their own development. And as this empowerment grows and their participation in governance increases, they become leaders of their own development and not objects of governments policies and decisions. If the marginalised communities are not involved then e- government project will not eradicate poverty and it will be a waste to link e-governance In the South Pacific Island countries, it is imperative to increase

public awareness on the potential of ICTs and how it can help all communities in the development process.

Finally, it is worthwhile for third world countries including Asia and Pacific to take heed of and possibly replicate the very successful PFnet system that is operating in the Solomon Islands and South Africa.



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## **Appendix 1: Example of an Agreement between RDVA and a PFnet Committee and Operators.**

### **AGREEMENT BETWEEN RDVA AND PFNET RARUMANA COMMITTEE**

#### **Definitions**

People First Network (PFnet) is an Information and Communications Technology (ICT) project implemented by the Rural Development Volunteers Association.

#### ***Rural Development Volunteers Association (RDVA)***

The Rural Development Volunteers Association is an association registered as an independent non-profit organization, but affiliated to the Rural Development Division (RDD) of the Ministry of Provincial Government and Rural Development (MPGRD). RDVA will work closely with RDD to implement rural development projects such as PFnet.

#### ***Rural Fisheries Enterprise Project (RFEP)***

RFEP are the EU project who have funded the email station equipment and deployment, and donated the RFEP radio to the email station which will be run as a community owned station.

#### ***The Rarumana Email Management Committee***

The Rarumana Email Management Committee is a management body identified and appointed by the Community or Communities who will benefit from the Services provided by the Email Station. The Committee fully represents the Community and its members are leaders of each sector of the Community, such as Education (school), Health (clinic), Women, Youth, Church, and may include a representative of a project or NGO active in the area.

#### **Committee members:**

Chairman: Ronald Kere (Seaweed Farmers Assoc.)	Maga Govete (Women, UCWF)
Treasurer: Frank Mone	Neneti Zutu (Women, SDA)
Secretary: Elliot Joi	Leva Mone (Youth - boys)
Eron Hite (United Church)	Una Botikera (Youth – girls)
Pastor Henry Sale (SDA)	Silas Izoma (Education – Principal, Primary)
Pastor Vince Boso (CFC)	Kenny Tuti (Health – Nurse at the clinic)
Andrew Pulomana (Anglican)	Dick Allen (Chairman General Meeting)
Sunil Dari (COC and Tourism)	Nicol Kuriti (Chairman, Council of Elders)
Gibson Pae (Catholic)	Wesley Gatoke (RFEP)
Maloe Daga (Methodist)	

#### ***The Email Station Operator***

Under this partnership agreement the Email Operator is referred to as the OPERATOR. The Operator (or Operators) is(are) identified and chosen by the Community and should have some basic computing, secretarial/typing skills or attained a reasonable level of education (form3 and up) and has the right attitude to learn new skills and must be trustworthy.

The Operator is an employee of the Committee. The Chairman or a member should not be the operator. This allows independent decision making by the Committee in regards to disciplinary of the Operator and any matters arising from the stations operation.

The Committee will nominate a Main Operator who will manage the assistant operators.

#### **Nominated Operators:**

Main Operator:	Obed Joi
Assistant Operators:	Marina Gona

## **The Agreement**

This is an agreement between the Rural Development Volunteers Association (RDVA) represented by PFNet and the PFnet Rarumana Email Management Committee (hereinafter called the Committee) on the installation and operation of a PFnet rural email station located at Rarumana, Western Solomons. The signatories of this agreement shall be referred to herein as the Partners.

This agreement covers the location, security, roles and responsibilities of the Partners and operational management of the email station.

## **Duration**

This agreement and Committee membership shall be in force for period of twelve months from 1st Sept 2003 to 1st Sept 2004, after which operations will be reviewed by the parties involved with the project.

### **RDVA/PFNet agrees to:**

- Supply and install the email station equipment
- Train the operator
- Hold a meeting to educate the Committee about the email station
- Hold public meetings to raise awareness about the service
- Provide technical support to the Operator by radio and other means
- Keep the station supplied with consumable items required for operations
- Publicise the service in Honiara
- Manage and advise the station operator
- Update and inform the Committee as necessary
- Guide and advise the Committee when it is called on to mediate in community consultations and/or information dissemination on behalf of development partners
- To supply monthly revenue disbursement information to assist the Treasurer and Operators to manage the revenue sharing.

### **RFEP agree to:**

- The email station being operated as a normal PFnet community owned and managed facility
- All operations to be incorporated into the People First Network management system
- All responsibility for maintenance to be shared by PFnet and the Committee only.

### **The Committee agrees to:**

Provide secure premises for the email station including mounting of the antenna

Identify/nominate suitably skilled persons to operate the email station at all times

Ensure only the designated Operator (s) and people authorized by the Committee (and agreed by PFnet) are allowed to access, use and operate the email facilities which includes a Laptop, Printer, Trans-receiver, HF Modem and Solar Power System. (RFEP may instruct RDVA to advise the Rarumana Committee to utilize the equipment in other ways as it sees fit).

Allow RFEP project staff to send and receive emails free of charge. All other services and printing will be charged as normal.

Allow the Seaweed Farmers' Association privileged use of the email as agreed between the partners.

Agree leave with the Operator and nominate temporary replacement staff to cover absence of the Operator during leave.

Oversee & monitor the operation of the station to ensure that the Operator carries out the agreed duties,

Advise & caution the Operator as appropriate where services and duties are not carried out as agreed,

Monitor the public usage of the station and where appropriate promote and publicise the service to raise awareness maximize the public usage

Assist the Operator in collecting grassroots news reports to send to PFnet

Promote the station and ensure that all sections of the public have access

Monitor the security of the station and ensure that it is protected at all times from damage or loss

Notify the PFnet Manager of any problems and comment on the operations, and provide suggestion as how the service may be improved.

When a Committee member is traveling to Honiara and is able to visit the RDVA Office, he/she should contact the PFnet Manager to hold a face-to-face meeting to exchange information and ideas.

The Committee members & Operators are entitled to join RDVA and are encouraged to do so.

Encourage interest and raise awareness of school students of the email system and ICTs in general.

To act as intermediaries to help the community and it's component groups to understand their information and

communication needs, to help them interpret information sent to the community, and to help them to use the facility.

When called on, to hold public meetings on behalf of development partners with guidance from PFnet, to disseminate information and/or to consult the community and report back opinions and feedback to the development partners.

### **The Committee Treasurer will:**

Hold the cash revenue of the station

Calculate the monthly allowance and pay the operator (PFnet will send summary sheet)

Calculate the share of revenues payable to the Committee and keep accounts (PFnet to confirm)

Calculate the share payable to RDVA and hold these funds until they can be safely transferred to PFNet management in Honiara on any immediate but secure means.

### **Location**

The station will be located at Rarumana Village inside the new Seaweed Farmers' Association office building.

### **Cost of Services**

The station will provide the following services:

Send email (\$2)

Receive email (50c/additional page printed)

Typing letters and documents (\$5/page)

Internet Searching using TEK (web search) requests (\$5 per request plus \$10 per hour browsing results with operator assistance, 30 minutes free)

Print out news reports received from PFnet (\$3 for 6-page issue or 50c/page)

OBIS Services (\$15.00 for online business information, \$50 for web page adverts on Commerce website)

Message delivery notification (free – system is not guaranteed)

Printing documents (50cents/page or \$3/page for colour)

Private Email accounts (\$75 / month)

The email station will also be used to provide free community information including latest weather reports, and to collect and disseminate opinion and grassroots news via PFnet, free of charge.

### **Duties of Operator**

The Operator will have the following duties:

Open the email station during agreed opening hours,

Provide the services as above,

Collect local news stories for PFnet and display news reports received from PFnet

Keep a daily log of email sent/received, other services and revenue

Send the daily log to the PFnet Manager by email every working day

Make a monthly report for the Committee and email a copy to the PFnet Manager

Manage cash and transfer to Committee Treasurer at regular intervals

Maintenance: look after PFnet equipment, keep it secure, update anti-virus whenever update disks are received from PFnet, inform PFnet in advance when consumables need to be restocked, etc.

Make sure that PFnet equipment and consumables, including the computer, paper, printer and radio are only used for Email Station operations. PFnet will not replace paper and ink which has been used for other purposes.

### **Opening hours**

The Station will be opened for public use during hours which best suit the community. The Operator may be occasionally required to transmit and receive email out of these hours, including weekends for example if a large data file needs to be sent, or in an emergency, or at the discretion of the Operator and the Committee.

**Operator Allowance**

On the last day of each month, the Treasurer will calculate the Operator’s allowance. This will be calculated from the total revenue for that month as follows:

Revenue is less than \$300.....100% of Revenue  
Revenue is greater than \$300.....\$300 plus 30% of surplus  
(rounded to nearest dollar)

Examples:

Revenue = \$731 .....Allowance = \$300 + 0.3 x (731-300) = \$429  
Revenue = \$345 .....Allowance = \$300 + 0.3 x (345-300) = \$314  
Revenue = \$215 .....Allowance = \$215

There will be no paid leave granted to the Operator. If another person fills in for the Operator due to sickness or other absence, the monthly allowance will be shared according to the number of days worked. This allowance calculation will be reviewed and a new agreement made after three months.

**Committee and RDVA Share**

On the last day of each month, the Treasurer will calculate the Committee's share. This will be calculated from the total revenue for that month as follows:

Revenue is greater than \$300.....30% of surplus  
(rounded to nearest dollar)

Examples:

Revenue = \$731 .....Allowance = 0.3 x (731-300) = \$129  
Revenue = \$345 .....Allowance = 0.3 x (345-300) = \$14  
Revenue = \$215 .....Allowance = \$0

The Committee is strongly advised to hold it’s share as a fund for future maintenance costs including equipment replacement or repair. *However, The Committee may use its discretion to use it’s share to help promote the services of the Email and enable the Committee to function.*

The RDVA will receive the balance (i.e. 40% of the surplus over \$300) to be used for maintenance of the email Station Operations. All such revenue from rural stations is deposited in a maintenance fund.

**Revenue Collection for PFnet**

The Operator will hand over the cash from sales to the safe-keeping of the Treasurer. The Treasurer will write a receipt.

On the last day of each month, the Treasurer will pay the Operator the calculated allowance based on the month's revenues. The Treasurer will calculate (with advice from PFnet) and record the share payable to the sub-committee and the balance payable to RDVA. PFnet will send the monthly statistics and shares payable for all email stations, in a summary.

The Committee will hold the RDVA balance and transfer the funds as soon possible. The best way will to be deposit it in the NBSI in Gizo when it is convenient, and to advise PFnet by email.

The PFnet Maintenance Account details are:

Bank: NBSI  
Name: People First Network (PFnet) Maintenance Account  
Number:

The PFnet Manager will monitor the usage and revenues from Honiara. It is possible to verify the number of emails sent from and received by each Station, and these records should agree with the daily log sent by the operator.

## **Confidentiality**

Because the operator has to type in the messages, she will be party to confidential information. The contents of messages sent by customers are not in any circumstances to be divulged. If the Committee or PFnet receives complaints that private information has been divulged and the indiscretion of the operator is deemed to be the cause, the Committee will consider what disciplinary action to take, which can include dismissal.

For this reason, the Committee and Operators must discourage children and curious onlookers from entering the email room and observing the Operator whilst at work.

Messages received by the station are printed out and sealed by folding and stapling to be stored in a safe box awaiting collection. The operator does not need to, and will be required not to read these messages unless requested by the person it is addressed to.

## **Equipment Replacement and Repair**

Where equipment fails under normal conditions, PFnet will try to replace the equipment using its maintenance fund. PFnet will also expect the Committee to contribute through its own savings and through community contributions raised through fund raising, etc. However, this is dependant on the available budget and PFnet can make no guarantee. Therefore it is in the best interest of the community to protect and look after the facility. These procedures in this agreement have been designed to minimize the risks of equipment failure.

## **Loss, Theft and Malicious Damage**

In the case of equipment being stolen, maliciously damaged or otherwise lost from use through non-accidental means nor wear and tear, it is the responsibility of Rarumana Email Committee to

Report all such loss or damage to PFnet Manager using the quickest available means of communication, including the circumstances and items lost or damaged,

Report all losses to the Provincial Police,

Make all possible efforts to locate and restore stolen equipment,

Raise the replacement cost of any stolen and/or damaged equipment, including the cost of travel, and other installation expenses (PFnet will assist using funds from its maintenance account as budget allows)

PFnet will only consider assisting the Committee to restore the station following such losses when the police enquiry has been successfully completed and the culprits identified and punished, so that the threat of any repeat criminal activity is diminished. It will also depend on the positive outcome of a security assessment of the community locale.

## **Access**

Under the partnership as laid down by this agreement the Rarumana Email Station is a public facility allowing all people to have access to the email facility, including visitors. Access to the station must be provided at all times without prejudice or discrimination resulting from church affiliation, ethnic grouping or gender. The Committee should especially encourage women, young people and vulnerable groups to utilize the facilities.

## **Ownership and Conditions for Delivery of PFnet Services**

The email station equipment has been donated to Rarumana village by RFEP to deliver email and other services. The equipment can only be removed or moved with agreement of RFEP (or EU office consequent to the closure of RFEP) However, connection to the PFnet network and thus to the Internet email will only be allowed if all the conditions in this agreement are met. RDVA reserves the right to disconnect PFnet Rarumana if any of these conditions specified in this agreement are not met.

Reconnection of services in an event of any disconnections may only take place through a renegotiation process leading to the re-signing of this agreement.

## **Signing**

The Parties herein agree to honour the duties and responsibilities outlines above and carry them out in the spirit of cooperation to ensure the success of the PFnet email Station and the benefits to the people of Western Solomons.

Date: 21<sup>st</sup> Septemeber 2003

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David Leeming, PFnet Technical Advisor, for RDVA

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Ronald Kere, Chairman, PFnet Rarumana Committee

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Project Manager, RFEP

**Appendix 2. Agreement between RDVA, PFnet Rarumana Committee and PFnet Rarumana Operators on Terms and Conditions for Employment as Email Station Operator.**

**Agreement**

This is an agreement between the PFnet Rarumana Committee (hereinafter called the Committee) and the PFnet Rarumana Operators on the terms and conditions for employment as Operator of the PFnet rural email station located at Rarumana.

This agreement refers to the main agreement between RDVA and the Committee signed on 21<sup>st</sup> September 2003 (herein called the main agreement).

**The Committee agrees to:**

Carry out the duties and responsibilities outlined in the main agreement, including payment of monthly allowance, monitoring and support of the Operator.

**The Operator agrees to:**

Carry out the duties and responsibilities outlined in the main agreement with training and support from PFnet. To be included in national PFnet training and other programmes.

Date: 21<sup>st</sup> September 2003

\_\_\_\_\_  
Obed Joi, Main Operator

\_\_\_\_\_  
Marina Gona, Assistant Operator

\_\_\_\_\_  
Ronald Kere, Chairman, PFnet Rarumana Committee

Witnessed by:

\_\_\_\_\_  
David Leeming, PFnet Technical Advisor, for RDVA



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