



Pacific Institute
of Public Policy

Social and economic impact of introducing telecommunications throughout Vanuatu

Key messages:

- » There is increasing use of and access to mobile telecommunications throughout Vanuatu and in rural areas in particular.
- » The main reason for non-use remains the high cost of using telephony.
- » Telecommunications is positive for social and financial capital.
- » Users generally consider telecommunications as critical for economic activity and would find it difficult to continue if they no longer had access.
- » The benefits of mobile telephony also comes with social and economic costs.
- » Gender and geography were important in determining ownership and use of mobile telephony.
- » Mobile phone use will become more sophisticated as users become more experienced.
- » The telcos have introduced commendable marketing strategies to increase the affordability to their customers.

This paper provides an overview of the Pacific Institute of Public Policy study¹ into how people in urban and rural Vanuatu exploit access to telecommunications, and how the use of telephony impacts on household livelihoods. It also considers the implications of telecommunications for gender dynamics, small and medium enterprises, and rural-urban linkages.

How did we do it?

The study draws on recent research conducted by the British Government Department for International Development (DFID), assessing the impact of telecommunications on poverty reduction and rural livelihoods in India, Mozambique and Tanzania². The underlying conceptual framework of the DFID study uses the Sustainable Livelihoods Framework³.

In adapting the DFID model, a detailed household survey was developed incorporating contextual changes to ensure relevance for Vanuatu. A total of 185 respondents were randomly selected from six locations: three rural (Isini, Lamnatu and Port Olry) and three urban (Freswota 1, Blacksands and Chapuis East). The research sites represent a cross-section of rural and urban Vanuatu.

The survey sets out to find how households use telephony and how such uses impact on livelihoods. It identifies the linkages between contexts (rural/urban), patterns of use (including access and/or ownership of phones) and impacts on livelihoods (livelihood strategies and vulnerability of context). Comparing and contrasting rural and urban households is particularly important in the context of the dual (urban-rural) economy of Vanuatu.

A further 90 individuals participated in semi-structured interviews and focus group discussions to probe deeper into the impact of telephony on individuals and households. Drawing on the survey and qualitative research methods, the report presents three case studies: Small and Medium Enterprises & Telecommunications, Gender and Telecoms, and Rural - Urban Linkages and Telecoms.

Briefing Paper:

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November, 2008

1. Sijapati-Basnett, B. (2008) *Social and economic impact of introducing telecommunications throughout Vanuatu: research findings report*. Port Vila: Pacific Institute of Public Policy.

2. Souter, D., N. Scott et al. (2005) *The Economic Impact of Telecommunications on Rural Livelihoods and Poverty Reduction: A Study of Rural Communities in India (Gujarat), Mozambique and Tanzania*, Commonwealth Telecommunications Organization for UK Department for International Development.

3. The Sustainable Livelihood Framework has four key interrelated components: vulnerability, assets, structures and livelihood strategies (refer www.livelihoods.org).

Why did we do it?

In response to global moves towards liberalisation and the rapid developments in telecommunications technology, the Government of Vanuatu faced considerable pressure to end the TVL⁴ exclusive franchise prior to its 2012 end date. The argument for breaking the monopoly centred on promoting competition and separating out the regulatory powers from service providers. The end result anticipated better network coverage and lower prices.

The Telecommunications Act was amended in 2007, opening the market to competition. As part of negotiations to end the exclusive license arrangement, the Government surrendered its one third share holding in TVL, which became a fully privately owned entity. In December 2007, Caribbean based company, Digicel, was granted a licence to provide mobile telecommunications in Vanuatu. Presently, Digicel operates in five markets in the Pacific (Samoa, Papua New Guinea, Tonga, Vanuatu and Fiji) with an experimental license in the Solomon Islands.

Lessons from other from other developing countries suggest both pro-poor and distributional inequalities arise from differential access to telecommunications. However, to date there has been little research specific to Vanuatu or the Pacific more generally. The differing geographic, cultural and economic context of Vanuatu needs to be considered in any understanding of the widespread introduction of telecommunications services throughout the country; particularly in rural areas that have been largely isolated from urban centres and activities.

What did we find?

The study offers a snapshot of behaviour and impact of telephony on livelihoods at a time when the telecommunication sector was opened up to competition and a new service provider first commenced operation.

Respondents were generally aged between 25 and 35 years, and most had secondary education. The average household size of was 5.7 with 3.1 adults and 2.6 under the age of 18. There was an imbalance in gender of respondents because men were more willing to participate and more forthcoming in their responses than women were. Migration, both within Vanuatu and overseas, was an integral part of life for respondents, with the majority of respondents reporting household members living in other parts of Vanuatu or overseas. Rural respondents generally worked in agriculture whereas urban dwellers were more likely to engage in small business such as running a kava bar, retail store or working for others.

It is important to note that the purpose of the study was not to report on tele-density, but rather to investigate behaviour patterns of users telephony in general and mobile phones in particular.

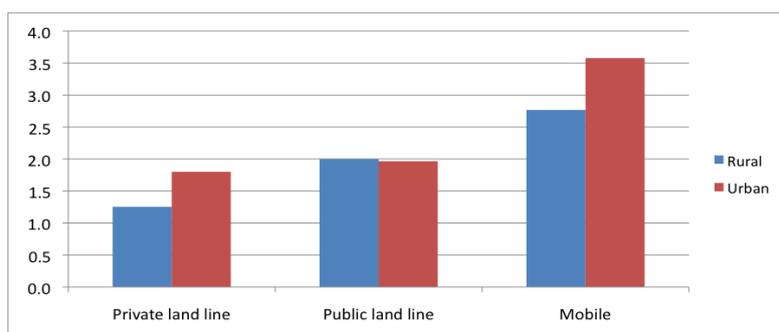
4. Telecom Vanuatu Limited - at the time a three way joint venture between the Government of Vanuatu, Cable and Wireless and France Telecom.

The key findings include:

Increasing use of and access to mobile telecommunications throughout Vanuatu and in rural areas in particular⁵:

- *Approximately 51 per cent of respondents indicated the first mobile in the household was acquired in the last year, 13 per cent in the last 1-2 years, and 33 per cent more than 2 years ago.*
- *The majority of rural respondents (80 per cent) had first acquired a mobile phone in the last year.*
- *The majority of those who do not own a mobile intend to acquire one in the next year.*

Figure 1: Frequency of use of different types of telephony



As demonstrated in the figure above, mobile is the preferred mode of telephony in both rural and urban areas. Most respondents said they did not use a private land line.

Primary reason for current non-use remains the high cost of using telephony including costs of charging and opportunity cost of finding network coverage:

- *The 'digital divide' between rural and urban Vanuatu is shrinking, although there are still marked differences in access to services such as water, electricity, telephone, television, fridge, radio and computer between rural and urban areas.*
- *Only 47 per cent of rural respondents had access to electricity compared to 85 per cent of urban dwellers. The lack of access to electricity poses a significant hindrance to mobile phone use in rural areas. As one respondent from Lamnatu stated: "I pay as much as your monthly electricity bill just on charging my mobile".*
- *Rural users are more likely to share mobile phones with other household members whereas urban dwellers are more likely to own individually.*

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5. It is not possible to quantify without access to commercially sensitive information from the two mobile service providers. Besides tele-density does not provide an accurate measure of usage as this study confirms collective access through shared usage (unlike in developed markets where ownership generally translates to usage).

The impact of telecommunications on livelihood is positive for social and financial capital:

- Both rural and urban users reported increasing access to telecommunications is leading to more contact with family and friends, improving information regarding family events, reducing cost of travel, and increasing speed of communication.
- There is a positive relationship between perceived access to telecommunications and perceived livelihood improvements.

Users generally consider telecommunications as critical for economic activity and would find it difficult to continue if they no longer had access:

- Telephone is valued most in communicating for social information, emergencies, and education, but has not replaced face-to-face communication in business activity.
- The advent of competition in the telecommunication market is affecting the value chain of businesses: reducing the cost of doing business (incremental benefits) and expanding business opportunities (transformational benefits).
- Of all business costs incurred, the highest costs were in logistics – mainly transportation to and from the market.
- All of the interviewees agreed mobile telephone was reducing/expected to reduce transactions costs of doing business.
- Women selling at the market in Luganville and Port Vila were earning significantly more than those in Tanna, and suggested their expenditure on telephony reduced travel and other costs.

The the benefits of mobile telephony also comes with social and economic costs:

- Interviewees with higher cash incomes expressed anxiety over the added financial burden of having a mobile telephone, including subsidising relatives for purchasing credit and/or charging costs.
- In rural areas, in particular, interviewees were concerned about the unprecedented increases in speed of information and communication flow introduced by mobile telephony.

Gender and geography were important in determining ownership and use of mobile telephony:

- Lessons from other developing countries suggest that policies aimed at increasing access to telephony does not 'trickle down' equitably.
- In Vanuatu, men are more likely to own mobile phone than women in both rural and urban areas.
- Women's ownership of mobile phones is shaped by

their relative influence in the intra-household decision making processes.

- Women were more likely than men to lack awareness of how to use mobile phones.
- Greater access to telephone services is playing a critical role in 'managing distance' between rural and urban households, and facilitating the redistribution of resources to rural households.

The level of sophistication in the use of mobile phones is likely to increase with more experience:

- Rural dwellers in particular were generally only using basic calling functions of mobile phones.
- Business people have yet to exploit the potential uses of telephony to promote existing businesses or start new enterprises.
- Examples from developing countries illustrate different ways in which the government and its development partners can employ mobile telecommunications as an innovative platform to target enterprises.

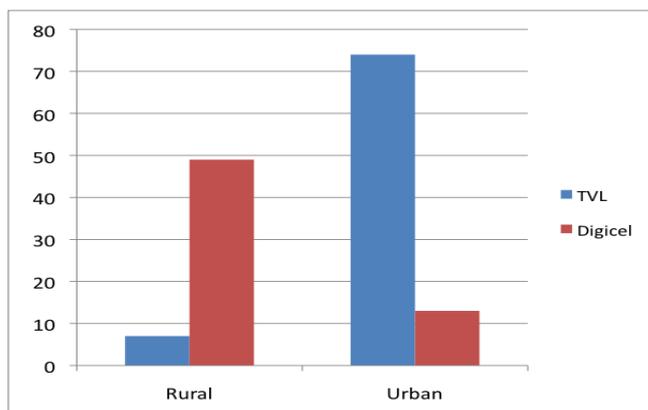
The telecommunication companies have introduced commendable marketing strategies to increase the affordability to their customers:

- Low priced new handsets, reduced cost of SIM, lower tariff rates and per second billing.

Generally, the preferred service provider in rural areas was Digicel and TVL in urban areas:

- Urban respondents who used both service providers suggested Digicel was better for keeping in touch with family and friends in the islands, whereas the level of service provided by TVL was seen to improve dramatically since the advent of competition.
- Rural respondents tended to prefer Digicel in areas where the company was providing network coverage for the first time.

Figure 2: Mobile telephony usage by service provider



What do we need to do next?

In order to capitalise on the benefits of improved access to telecommunications, policy makers, private sector, and other interested stakeholders need to consider options for addressing affordability, improving complementary infrastructure, reducing gender inequalities, and facilitating the transfer of resources to rural areas.

Recommendation 1: Investigate private sector initiatives together with public-private partnerships to address issues of affordability, drawing on examples from other countries.

Recommendation 2: Improve complementary infrastructure to fully realise the benefits of increased access to telecommunications, including roads, shipping and electricity.

Recommendation 3: Disseminate examples of how mobile telephony can benefit small and medium enterprise development.

Recommendation 4: Target women with information campaigns to encourage use and better understanding of mobile telephony to assist in mitigating gender inequalities in access to telecommunication services.

Recommendation 5: Carry out further research to investigate how mobile telecommunications can facilitate the redistribution of resources to rural areas.

Recommendation 6: Update this research project in twelve months time to confirm findings and track any changes.

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This briefing paper is based on the research findings report *Social and economic impact of introducing telecommunications throughout Vanuatu*, which is available on the PiPP web site.

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