

# Research activity on the reality of the digital divide in the Pacific Region

Toshio Kosuge

Professor

University of Electro-  
Communications,  
Tokyo

# Introduction

- “The missing link” is still missing after more than 25 years of the final report of Independent Commission for World Wide Telecommunications Development ,ITU
- New technologies could enable developing countries to replace their outdated and inadequate networks with systems, which would offer opportunities hitherto unavailable to them
- Extending national networks to rural and remote areas posed a particular challenge
- Digital Divide has been widening in the developments of digital technology than analog technology

# To bridge the Digital Divide

- The developments in IT contain both opportunities and challenges
- The issue of digital divide was the focus of attention of the summit in Okinawa, the UN Millennium Summit, Pacific Islands Summits and WSIS

# Overview of the ICT in the Pacific Region

- Overall infrastructure improvement in the region, but very slow
- Privatization but not liberalization in services
- Widening divide between urban and rural areas in the country

# Universal Service for Rural Areas in the Pacific Region

- Basic objectives are to trigger and sustain structural and economic development
- Information and telecommunication are Basic Human Needs(BHN)/life line
- Public service telecommunication service shall be established within the framework of Universal Service

# Further Disadvantages of Rural Areas

- Low education level, high illiteracy rate
- Hardly any job opportunity
- Low income per capita and per family
- Increasing migration of the young to urban center
- Unreliable and badly functioning transport
- Irregular, if any power supply

# Further Disadvantages for Rural Areas

- Poor health care and medical services
- Lack of other government services
- Little participation in national affairs

IT services contribute to minimize the above mentioned disadvantages and generally improve the quality of life in rural areas

# Issues for Telecom Network Building for Rural Areas

- Human resource development for communication-based applications
- Experts required to develop sustainable, communications-based applications are located within the professionals, academic, business and agricultural sectors



# End-user Skills and Training

- Need for basis literacy, computer skills and training in the use of IT remains barrier
- Language barrier and PC operation complexity also hinder Internet diffusion
- Skills required for Internet access

# Installation, Operation and Maintenance

- Lack of main energy supply in rural areas is a major obstacles to deploying telecom infrastructure
- With the use of wireless technology unexpected logistical details encountered in the field can be responsible for cost overrun and delays of service activation

# Information and Microfinance Information

- The support of small business creation in poor areas through micro loans, given to poor individuals for the purpose of capitalizing small business, has revolutionized development practices around the world
- Grameen Bank in Bangladesh as successful model

# Application Areas of IT Networks

- Public telephone as basic services in rural areas as well as broadband services
- Internet service as promising basic service for rural areas also(Multipurpose Telecenter,Community Tele-Service Center,etc)
- Internet service for multimedia communications

# Common Policies bridging Digital Divide

- The framework of policy and implementation to overcome the Digital Divide in the Pacific region
- Cooperation and coordination on policy
- The need of regional and international cooperation to enhance the function as a network

# Examples of Specialized Applications

- Community developments
- Health and medicine
- Small business developments
- Environmental monitoring and protections
- Education
- Emergency support and disaster relief

# Advancing Information Society

## ■ Priority areas for action

- 1) Infrastructure development
- 2) Securing affordable, universal access to ICTs
- 3) Developing human resource
- 4) Establishing legal, regulatory and policy frameworks
- 5) Ensuring balance between intellectual property rights and public interest
- 6) Ensuring the security of ICTs
- 7) Fostering partnership and mobilizing resources

## ■ Cross-sectoral priority programmes

- 1) E-government
- 2) E-business
- 3) E-learning
- 4) E-health
- 5) Community information and communication centers



## ■ National and regional e-strategies

Comprehensive ICT strategies that have been endorsed at the highest political levels and that include clear goals need to be formulated at community, national, regional and global levels in order to create the Information Society. These strategies will be encouraged to be designed and implemented through collaboration and participation of all stakeholders

# International Cooperation to overcome the Digital Divide

- Okinawa Charter on Global Information Society(2000), Japan-PIF Summit(1997, 2001, 2003), WSIS(2003)
- Asia Broadband Program(2003)
- Successful case:USPnet,and ODA related technical cooperation projects, ICT Center in the Pacific region

# International Cooperation

- Based on the PARTNERS and Post-PARTNERS program, R&D on Asia Broadband Satellite key technologies among Asia Pacific region
- Pacific region's participation to be expected in WINDS project