

# **Key Factors for the Successful ICT Cooperation Projects in Asia**

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# Contents

- What we have done.
- Where we are now.
- Where we should go.
- What should be done?

# Policy Documents on Global Level

- “Okinawa IT Charter” adopted at G8 Okinawa Summit (July 2000) called for global efforts to bridge the digital divide.
- “Millennium Development Goals” initiated by the Millennium Summit of the UN in 2000 identified in “Target 18” as follows:  
“In cooperation with the private sector, make available the benefits of new technologies, especially information and communications”.

# **The World Summit on the Information Society (WSIS) was organized by the UN**

## **Results of the WSIS (2003 and 2005)**

- WSIS 2003: Declaration of Principle
- WSIS 2003: Plan of Action
- WSIS 2005: Tunis Commitment
- WSIS 2005: Tunis Agenda

UN General Assembly in 2015 will examine the results of global challenge.

# **Our challenge: Benefits of ICT for All**

## **WSIS 2003: Declaration of Principles**

“Common Vision for an inclusive information society”

- Building an people centered information society
- Information Infrastructure: an essential foundation
- Capacity building: continuous life-long learning
- Building confidence and security in the use of ICTs
- ICT applications: benefits in all aspects of life
- Cultural and linguistic diversity and identity, local contents
- International and regional cooperation

# **WSIS 2003: Plan of Action**

## **To be achieved by 2015**

- To connect villages with ICTs and establish Community Access Points
- To connect universities, schools, research centres, public libraries, cultural centres, health centres and hospitals
- To connect all local governments and establish websites
- To adapt all schools curricula to meet the challenges of IS
- To ensure all people in the world have access to TV/radio
- To encourage the development of content in all languages
- To ensure more than half of the world's inhabitants have access to ICTs within their reach by 2015

# **Regional ICT Strategies in Asia and the Pacific**

- **e-APEC Strategy (APEC: October 2001)**
- **Bangkok Agenda (APT: July 2004)**
- **e-ASEAN Framework Agreement  
(ASEAN: November 2000)**
- **Pacific Plan: Digital Strategy (PIF: 2005)**

# National IT Strategies in Asia

- India: IT Action Plan – IT for All by 2008
- Indonesia: ICT Policy Framework, 5 Year Plan
- Japan: New IT Reform Strategy
- Korea: IT839
- Malaysia: National IT Agenda
- Philippines: PGMA's 10 Points Agenda
- Singapore: Infocomm 21 Master Plan
- Thailand: IT2010

# Comparison of each National IT Strategy

	Singapore	Malaysia	Philippines	Indonesia	Thailand	Viet Nam	Cambodia	e-ASEAN
1. Private Sector Initiatives	●	●	●	●	●	●	●	●
-Software Industry Promotion	●	●	●	●	●	●	○	●
- Promotion of ICT Venture	●	●	●	○		●	●	
2. Infrastructure Development	●	●	●	●	●	●	●	●
3. ICT Promotion	●	●	●	●	●	●	●	
4. Electronic Government	●	●	●	●	●	●	○	●
5. Development of Tele-applications	●	●	●	●	●	●	○	●
6. Human Capacity Building	●	●	●	●	●	●	●	●
7. Promotion of E-Commerce	●	●	●	●	●	●		●
8. Networks Securities and Intellectual Property Rights	●	●	●	○	●	●	○	●
9. Promotion of ICT Contents	●	●	●	○	●	●	●	●
10. Bridging the Digital Divide		●	●	●	●	●	●	●
11. Regional ICT Hub	●	●	●					
12. ICT strategy Head Quarter	●	●	●	●	●	○	●	- ●

# Example 1: National IT Strategy in Thailand

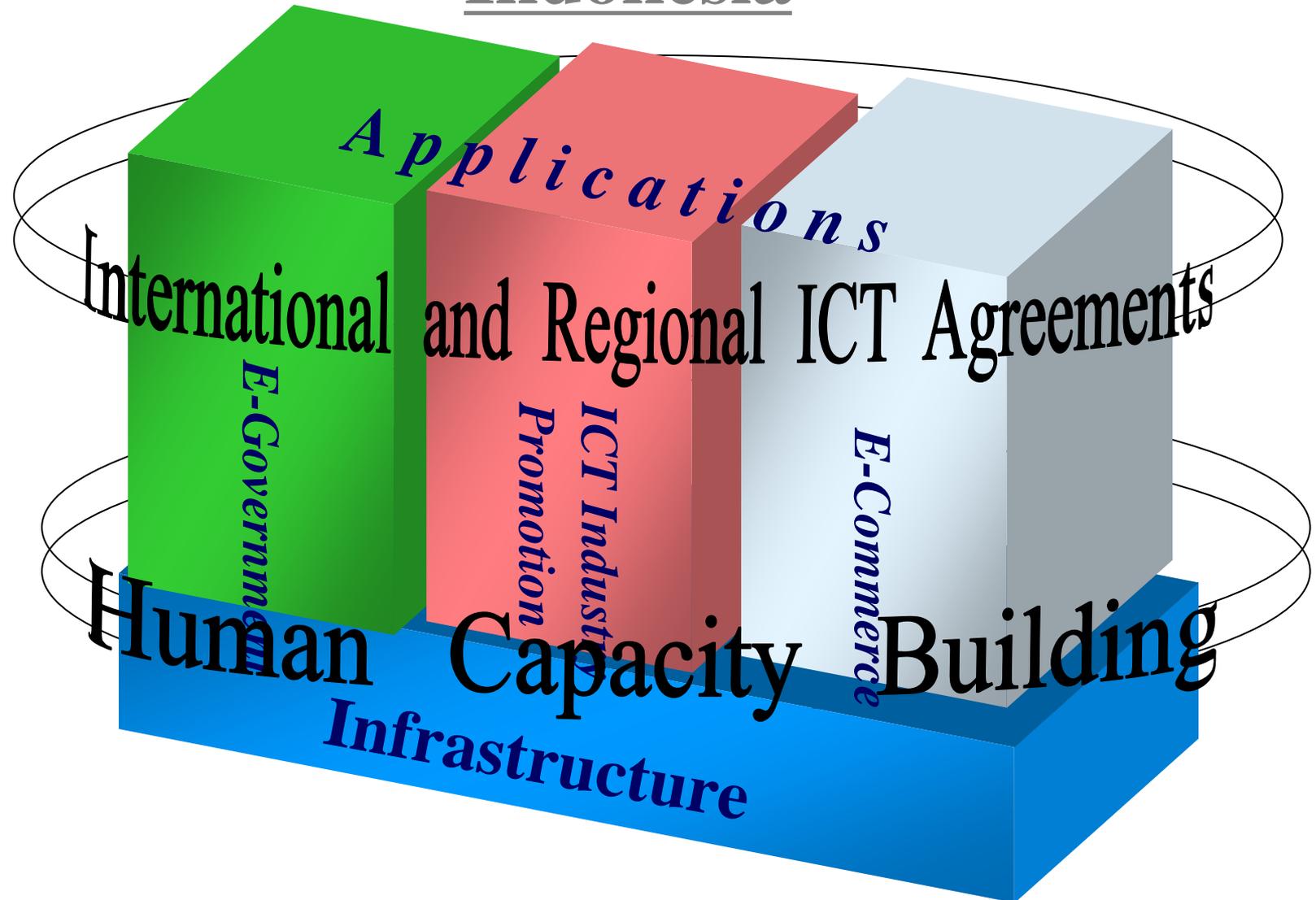
- 1996: “IT2000: Thailand IT Policy into the 21 Century”
- 2002: “IT2010: Thailand into Knowledge based Society”

## Five Strategic Flagships

- E-Society: Bridging the Digital Divide
- E-Education: HRD, lifelong learning & virtual education
- E-Industry: Promotion of IT related industry
- E-Commerce: Focusing on e-service
- E-Government: Public service, employment and infra.

First National ICT Master Plan (2002-2006)

# Example 2: National ICT Policy in Indonesia



## Example 3: National IT Policy in Malaysia

- Early 1990s, “Vision 2020: Malaysia as value-based knowledge society” was established.
- In order to realize Vision 2020, the Multimedia Super Corridor (MSC) was initiated.
  - Phase 1 (1996-2003): Creation of the MSC
  - Phase 2 (2004-2010): Link the MSC to other cyber cities in Malaysia and world wide
  - Phase 3 (2011-2020): Transform Malaysia into a knowledge society

**Common Target is**  
**“How to Bridge the Digital Divide”**  
and to realize  
**“Benefits of ICT for all”**

**Various types of international cooperation projects have been undertaken by governments, international organizations, private sectors and NGOs.**

# Lessons learned from experiences 1

- We have many success stories.
- At the same time, we have many miscarried experiences.
- We should learn not only from success stories but also from miscarried experiences.
- Because:

**“Every failure is a stepping stone to success”**

**Let’s consider this subject focusing on**

**“Human Capacity Building”**

# ICT related Human Capacity Building

- Basic education
- Higher education
- Vocational education/training
- General public (community people) education

(Without e-Citizen, there will be no success of e-Government project.)

# Case Study 1: Basic Education SchoolNet Program

For basic education, every country is promoting SchoolNet project: these are some examples:

- Thailand: SchoolNet Thailand
- Malaysia: Smart School Pilot – SchoolNet Project
- Indonesia: OSOL (one school one computer laboratory) Program

**Lessons learned 2: Step by step approach**

# SchoolNet Thailand

- **Evolution Stage (1995-1997)**
  - 50 participating school nationwide
  - Suffered from disparity in access charge between urban and local schools and lack of local content in Thai language
- **Development Stage (1997-2000)**
  - Large scale nationwide IP net called “[SchoolNet@1509](#)” was established
  - Development of Thai language content on the Internet was initiated
- **Expansion Stage (2001-2002)**
  - Expansion of SchoolNet to 5,000 school nationwide
- **Production Stage (2003 onwards)**
  - Expansion of all schools in Thailand (approximately 34,000)

# Malaysia and Indonesian Program

## Malaysia

- 1996: Ministry of Education (MOE) developed Smart School Concept.
- After finalized Smart School Pilot Project, MOE is expanding Internet connection to 10,000 schools nationwide
- SchoolNet in Malaysia is a dedicated educational backbone network for schools nationwide including Sabah and Sarawak.

## Indonesia

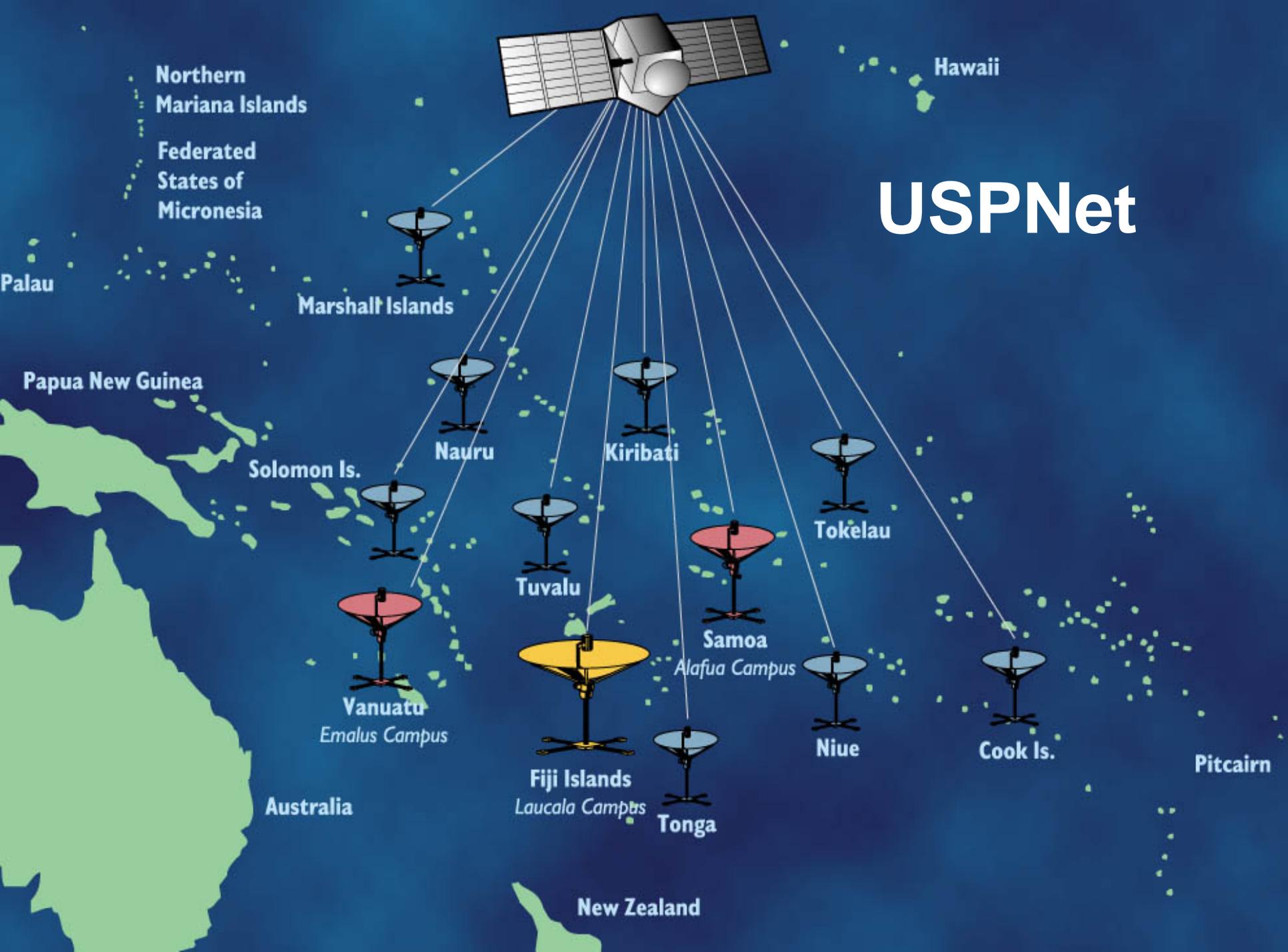
- 2003: Based on Ministry Decree No.17/KEP/M.KOMINFO/4/2003, Indonesia has started OSOL Program.
- OSOL Program is still at the initial stage of pilot project.

**Lessons learned 3; Status of SchoolNet development stage is different from country to country based on its economic and social conditions.**

# Case Study 2: Higher Education

## USPNet

- University of the South Pacific (USP) is a unique university established jointly by 12 Pacific Islands countries. (Now, total no. of students over 22,000)
- USP has long history of distance education over 30 years. Now, 60% of students study by distance.
- USPNet is an distance education network using satellite communication jointly established by the assistance of JICA, NZAID and AusAID.
- USPNet is now upgrading its application integrating with e-Learning technology called DFL.  
(DFL: Distance and Flexible Learning)



# Other examples of Higher Education

- SOI Asia Project (Led by Keio University in Japan with collaborations over 20 universities in Asia)  
(SOI: School on the Internet) [www.soi.wide.ad.jp/](http://www.soi.wide.ad.jp/)
- PEACESAT: Distance education network in Pacific Islands areas led by the University of Hawaii.  
[www.peacesat.hawaii.edu](http://www.peacesat.hawaii.edu)
- UNU: The Global Virtual University (GVU)  
The GVU is an online network of universities whose mission is to provide education for sustainable development led by the United Nations University (UNU) [www.gvu.unu.edu](http://www.gvu.unu.edu)

# Case Study 3: Vocational Education

## AEN (Asia e-Learning Network)

- AEN was established in 2002 by the proposal of the Government (METI) of Japan at ASEAN + 3 Economic Ministers Meeting in 2001.
- Missions of AEN are:
  - Share information on the latest e-Learning trends and technologies
  - Promote interoperability and resource sharing of e-Learning systems and contents
  - Promote the spread of knowledge on the effective use of e-Learning

# Activities of AEN

- Organized 4 Working Group (WG) to accomplish the goals and finalized in 2006.
- WG1: Conformance and Standards
- WG2: Technique for Multilingual Correspondence Contents Development
- WG3: Corporate Education and Higher Education IDer (instructional design)
- WG4: E-Learning content quality assurance

# **Lessons Learned 4: Continuous Efforts**

## Key word for Sustainable Development

### Examples regarding e-Learning

- E-Learning application is entering a new stage of effective and efficient implementation of higher education using web2.0 and SNS.
- UNU and UNESCO jointly organized conference on e-Learning called:  
“Pathways towards a Shared Future: Changing roles of higher education in a globalized world”.

# Case Study 4: General Public Education Development of Tele-center in Rural Area

## **Why Tele-center?**

- Without communication infrastructure, we cannot transform the Digital Divide into Digital Opportunity in rural and remote areas of developing countries.
- The most cost effective solution in rural area is to share necessary facilities at tele-centers.

# Development of Tele-center

- Since 1990's, ITU has been developing the Multi-purpose Community Tele-center (MCT).
- UNDP, UNESCO, World Bank and other international organizations and aid organizations in developed countries have been promoting the development of rural ICT development programs.
- Development of rural tele-center is common target of National ICT Strategies of developing countries.
- We have many success stories and also miscarried projects.
- Development of sustainable tele-center is one of the most difficult ICT projects in developing countries.

# **Roles of the Rural Tele-center**

- To create a knowledge center in rural community,
- To educate people and to enrich living standards,
- To realize grass roots access to global information through the Internet,
- To promote the sale of local products through the Internet and e-Commerce,
- To provide government information such as natural disaster warning to local communities, and
- To attract visitors from all over the world by demonstrating local culture and beautiful scenery.

# Various Approaches for Tele-centres (1)

## Tele-centres at Post Offices (Malaysia)

### Roles of stakeholders

- **Government** – provides policy and strategy to steer the program
- **Post Office** – provides key infrastructure
- **Community** – Program driver and to ensure the sustainability (volunteers from local community)
  - Establishment of steering committee
  - Development of local content and portal site
  - Implementation of IT training course (e-Learning)

# **Various Approaches for Tele-centres (2)**

## **Community e-Center: CeCs (the Philippines)**

- First CeCs has established on 20 October, 2004.
- NCC (National Computer Center) aims to establish 100 CeCs all over the country.
- Role of CeCs: (Multi-purpose)
  - Source of information for agriculture, education, health and livelihood
  - e-Learning Center and e-Library
  - Public Calling Office (PCO)
  - Internet Cafe

# Various Approaches for Tele-centres (3)

## Internet Tambon Initiative (Thailand)

Integration of National Economic Development Plan with National IT Strategy (IT2010)

- “One Tambon One Product Initiative”: Facilitation of local products and industries as a business incubation policy for SMEs
- “Internet Tambon Initiative” for the promotion of e-Commerce in rural area
- Established 8000 Internet Tambon all over the country: next target will be a village tele-center

(tambon is group of villages: sub-district)

# Various Approaches for Tele-centres (4)

## Solomon Island People First Net

- PFnet is an NGO-Government partnership initially established by the support of the UNDP with multi-donors funding.
- Tested model for sustainable, community-owned rural access using HF radio system
- Web site portal with rich content
- Facilitated networking for:
  - Distance learning
  - Agriculture and fisheries development
  - Indigenous business development
  - Rural vocational training

(source: UNDP report)

# **Lessons learned 5: From “one size fits all” To “full of variety”**

- Each country’s approach is based on the reality of its economic development stage, specific features of society, culture, and geographic conditions.
- Sharing information and collaborative learning are essential for the success of telecenter program.
- Taking into consideration of best practices and experiences of other countries, each country and community should create its own model with innovative idea.

## **Lessons learned 6:**

**There are still problems to be challenged**

- How to realize sustainable rural tele-centers ?
- How to implement cost-effective global internet access lines from rural areas of Pacific Islands countries ?
- How to raise awareness of community leaders and educate/train local community people to be able to utilize ICT technology and how to update their ability to catch up rapid progress of ICT? (lifelong learning)
- How to realize strategic alliance/partnership between government, business, academia/school and NGO?

# Sustainability of rural tele-center

- **Financial sustainability**

- How to draw necessary income from tele-center operation for sustainable operation and maintenance?
- There are many solutions but still unstable.

- **Operational sustainability**

- How to facilitate community people on the effective and efficient use of tele-center ?
- Continuous capacity building of tele-center managers through collaborative learning and information sharing

- **Technical sustainability**

- Still important problem to be challenged.

# Lessons learned 7:

## How to realize sustainable ICT project?

- **Lessons learned from Solomon Islands experiences**
  - To have mid-term and long-term development goals
    - 1st phase: People First Net (PFNet) program: establishment of 18 e-mail stations (now 27 stations)
    - 2nd phase: Distance Learning Center Project (DLCP)  
Establishment of 9 distance learning centers realizing broadband access using VSAT satellite terminals. (EU funded)
  - Continuous development of human capacity building in partnership with USP Center and UPNG Open College
  - To train excellent leaders groups for management, operation and technical support through the development of distance e-learning programs

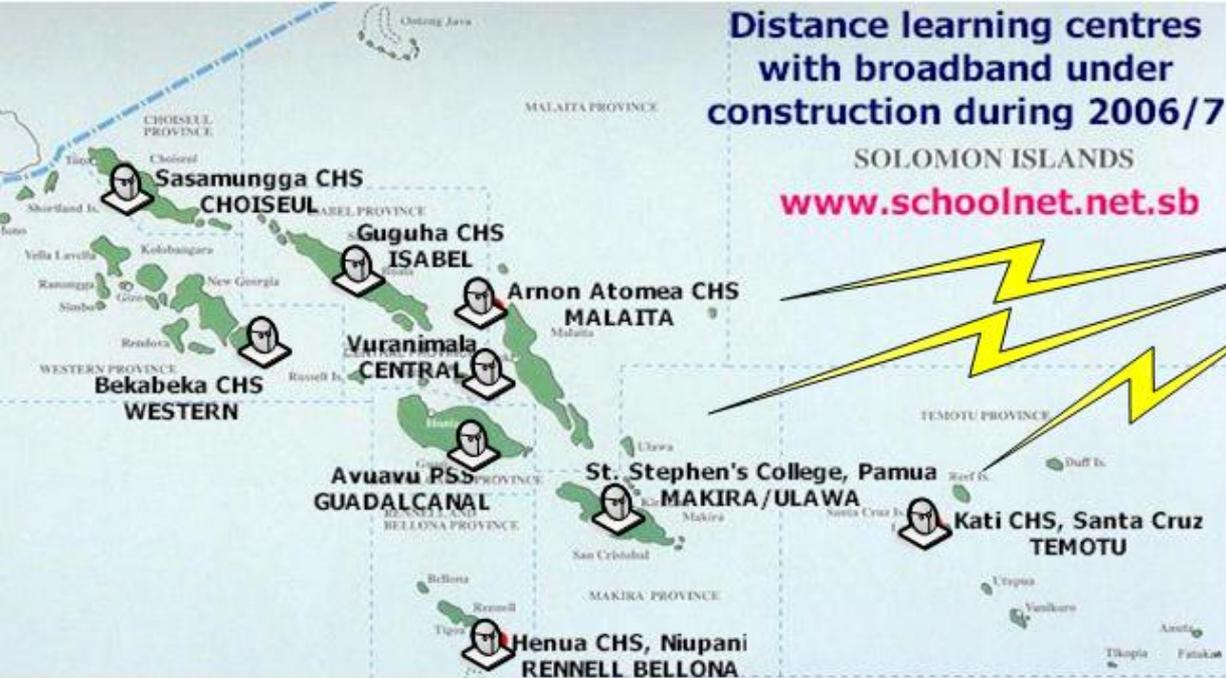


Background:  
The PFnet HF Radio Email Network

# Distance learning centres with broadband under construction during 2006/7

SOLOMON ISLANDS

[www.schoolnet.net.sb](http://www.schoolnet.net.sb)

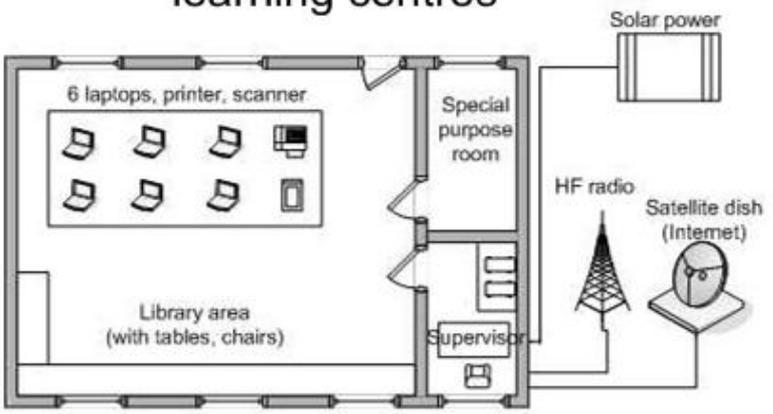


## New Skies NSS-5 Satellite



## Hub, Internet backbone, Adelaide

9 distance learning centres



## **Lessons learned 8:**

### **Every Failure is a Stepping Stone to Success**

#### **Examples of miscarried projects**

- **The Jhai Remote Village IT System in Lao PDR  
(Lack of careful management)**
- **Initial stage of Tele-center at Post Office Project in Malaysia (Now, it became a success story)  
(Insufficient HRD and community involvement)**
- **Initial Stage of PF Net in Solomon Islands (Now, this project is regarded as best practice)  
(Insufficient coordination with local community)**

## **Lessons learned 9:**

From Top-Down Process (hub and spoke)  
To Collaborative Learning (mesh network)

- Experts of international aid organizations should become facilitators in project planning and implementation process.
- Roles of experts are to provide discussion points, lessons learned from success stories and miscarried projects and to organize effective discussions among stake holders.
- His advises should remain one of solutions.

# Conclusion: Our Challenge

“New initiative of international cooperation should be encouraged”

Benefits of ICT for all !

Thank you for your attention.