

# The Greater Mekong Subregion and The Internet

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**GREATER  
MEKONG  
SUBREGION  
(GMS)**

# CHINA (Yunan)



2011

Population 46.7 M  
Internet Users 11.4 M  
FB N/A  
Internet Penetration 24.80%

[http://www.apira.org/data/upload/  
The29thStatisticalReportonInternetDevelopmentin  
China\\_P9G97q.pdf](http://www.apira.org/data/upload/The29thStatisticalReportonInternetDevelopmentinChina_P9G97q.pdf)

2011  
Population 48.7M  
Internet Users 110,000  
FB N/A  
Internet Penetration 0.98%

<http://www.internetworldstats.com/stat3.htm>

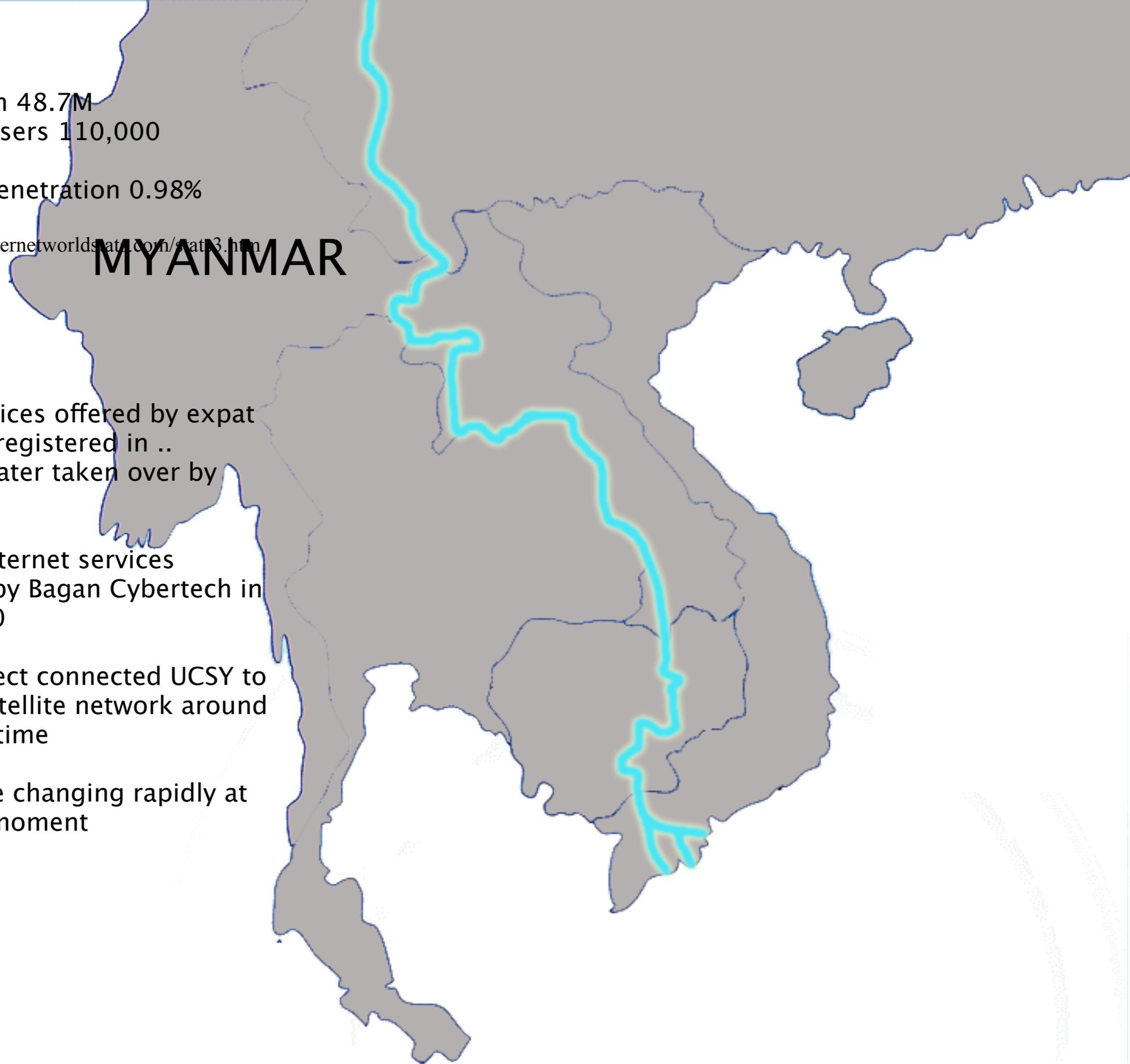
# MYANMAR

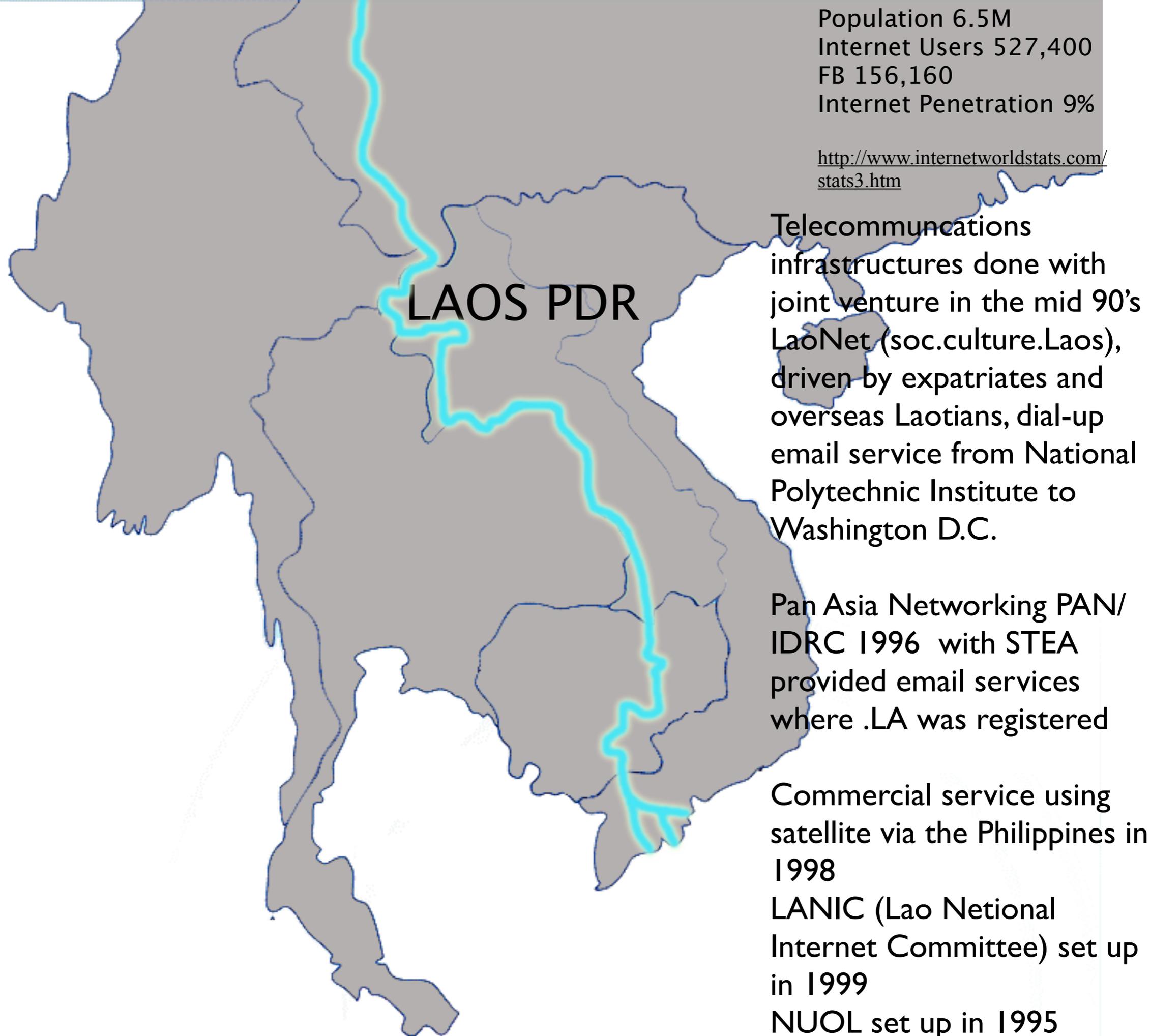
Email services offered by expat  
with .MM registered in ..  
.MM was later taken over by  
MPT

Limited Internet services  
provided by Bagan Cybertech in  
early 2000

WIDE Project connected UCSY to  
the A13 satellite network around  
the same time

Things are changing rapidly at  
this very moment





Population 6.5M  
Internet Users 527,400  
FB 156,160  
Internet Penetration 9%

<http://www.internetworldstats.com/stats3.htm>

Telecommunications infrastructures done with joint venture in the mid 90's LaoNet (soc.culture.Laos), driven by expatriates and overseas Laotians, dial-up email service from National Polytechnic Institute to Washington D.C.

Pan Asia Networking PAN/ IDRC 1996 with STEA provided email services where .LA was registered

Commercial service using satellite via the Philippines in 1998

LANIC (Lao National Internet Committee) set up in 1999

NUOL set up in 1995



UUCP email to U of Melbourne (Australia), UUNET (USA), U of Tokyo (Japan) in 1987 from AIT

.TH registered by AIT in 1988

Domestic Academic Net called CSNet established with three active members AIT, Chula, PSU. Connected to AARNET in Aust. Gateways at AIT and PSU.

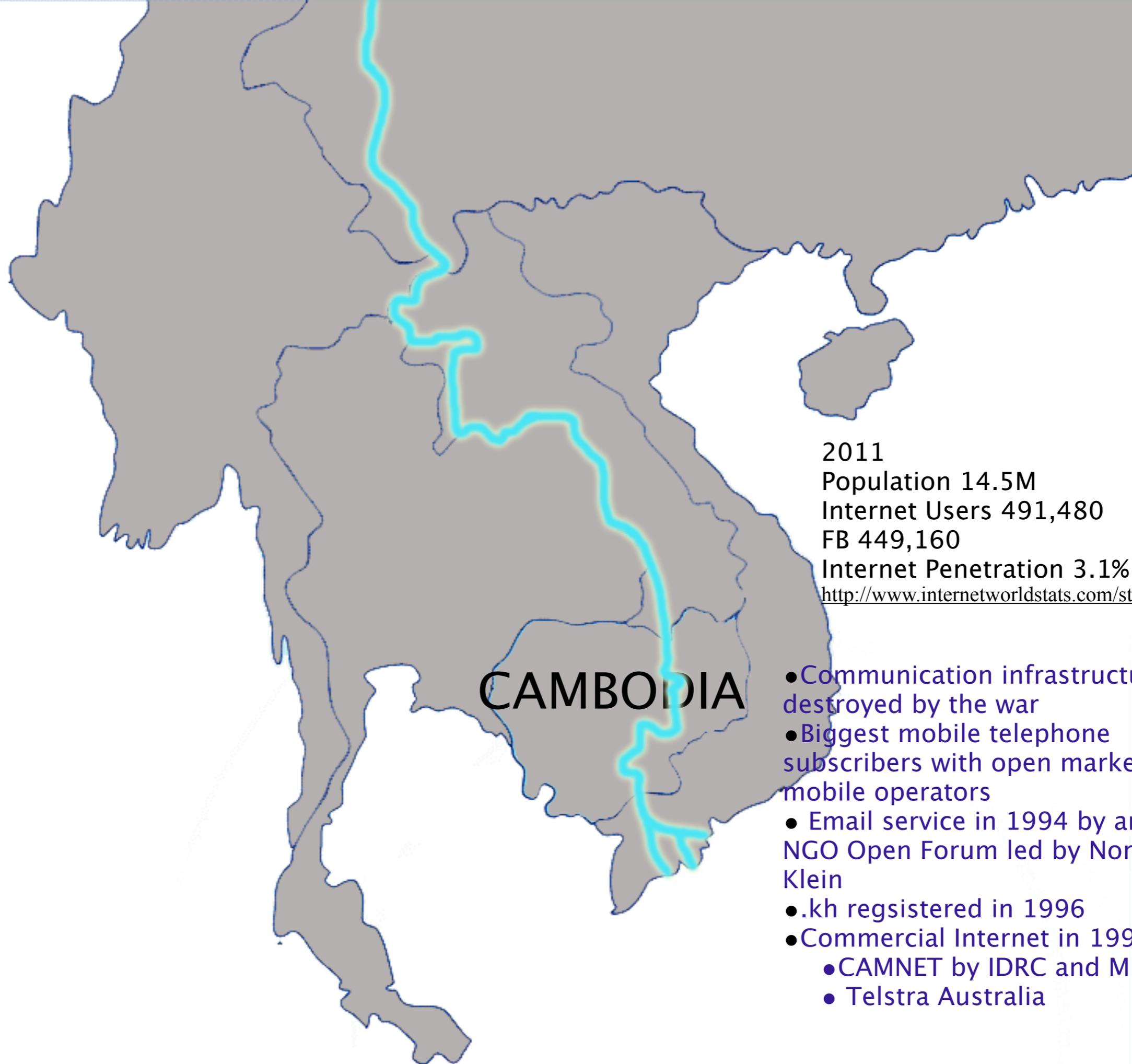
1992 Leased line to UUNET from Chula and subsequently NECTEC

1995 Commercial ISP's with licenses from state-own Communication Authority of Thailand

2011  
Population 65M  
Internet Users 18.3M  
FB 14.2M  
Internet Penetration 23.7%

<http://www.internetworldstats.com/stats3.htm>

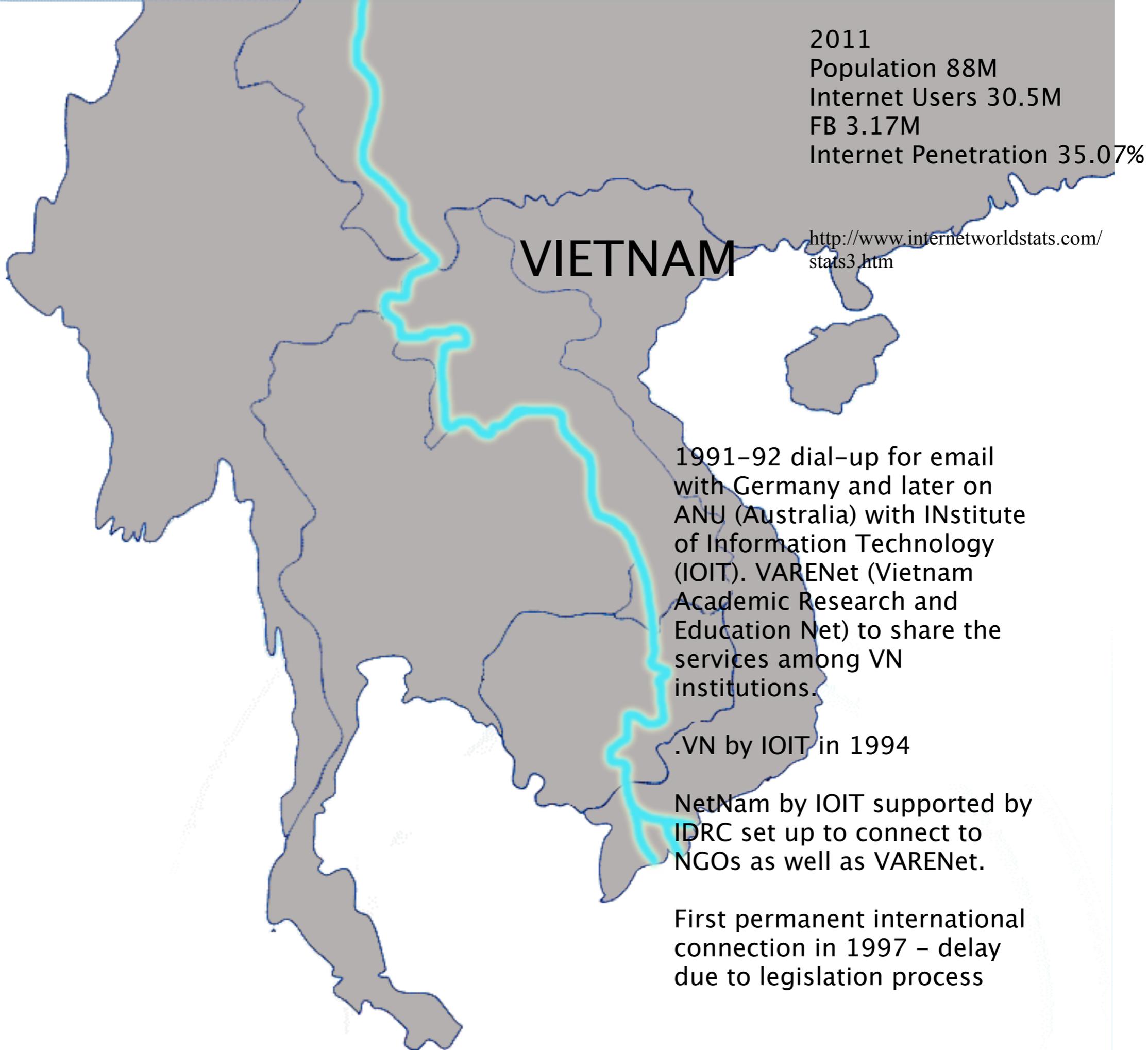
# THAILAND



2011  
Population 14.5M  
Internet Users 491,480  
FB 449,160  
Internet Penetration 3.1%  
<http://www.internetworldstats.com/stats3.htm>

# CAMBODIA

- Communication infrastructure destroyed by the war
- Biggest mobile telephone subscribers with open market for mobile operators
- Email service in 1994 by an NGO Open Forum led by Norbert Klein
- .kh registered in 1996
- Commercial Internet in 1997
  - CAMNET by IDRC and MPTC
  - Telstra Australia



2011  
Population 88M  
Internet Users 30.5M  
FB 3.17M  
Internet Penetration 35.07%

# VIETNAM

<http://www.internetworldstats.com/stats3.htm>

1991-92 dial-up for email with Germany and later on ANU (Australia) with INstitute of Information Technology (IOIT). VARENet (Vietnam Academic Research and Education Net) to share the services among VN institutions.

.VN by IOIT in 1994

NetNam by IOIT supported by IDRC set up to connect to NGOs as well as VARENet.

First permanent international connection in 1997 - delay due to legislation process

# Observations

- All had high phone prices with insufficient coverage
- State-own telecommunications operators
- Launching of the Email/Internet were driven initially by international communities (MM, LA, KH and even TH)
- Lack of government investment: Clean water, PCs or both?
- Cambodia and Laos driven by expats and are with small markets
- Thailand and Vietnam had strong academic community to nature the Internet development -- linking with Australian universities
- Cambodia, Laos and Vietnam received support from IDRC

# Key Players

- **Academic Institutions:** Asian Institution of Technology (TH), Chulalongkorn University (TH) , Institute of Information Technology (VN)
- **Expats and NGOs:** LaoNet (LA), Open Forum of Cambodia (KH)
- **External Agencies:** International Development Research Center (IDRC) for LA, KH and VN

# GMS Governments (I)

- How did we introduce the Internet to the government sector?

Ministry of S&T

Tourism Office

Health (no need for any introduction)

Parliaments

Education

## GMS Governments (2)

- What are the governments' roles? starting early 2000's

Internet within ICT policies and regulations  
(ITU, ADB, APT, UNESCAP)

Promotion - Broadband

Legislations to support E-commerce and  
to handle Cyber Crimes

Setting up NEW agencies to handle ICT sector

All, except LA and KH, set up SW parks!

# Internet Organizations

- **Capacity Building**

  - IDRC

  - Internet Society

  - APRICOT - 1995

  - APAN

  - APNIC

  - intERlab/AIT

  - NSRC (Network Startup Resource Center, USA)

- **Human Networking**

  - APNG (Asia-Pacific Networking Group)

  - AP\*

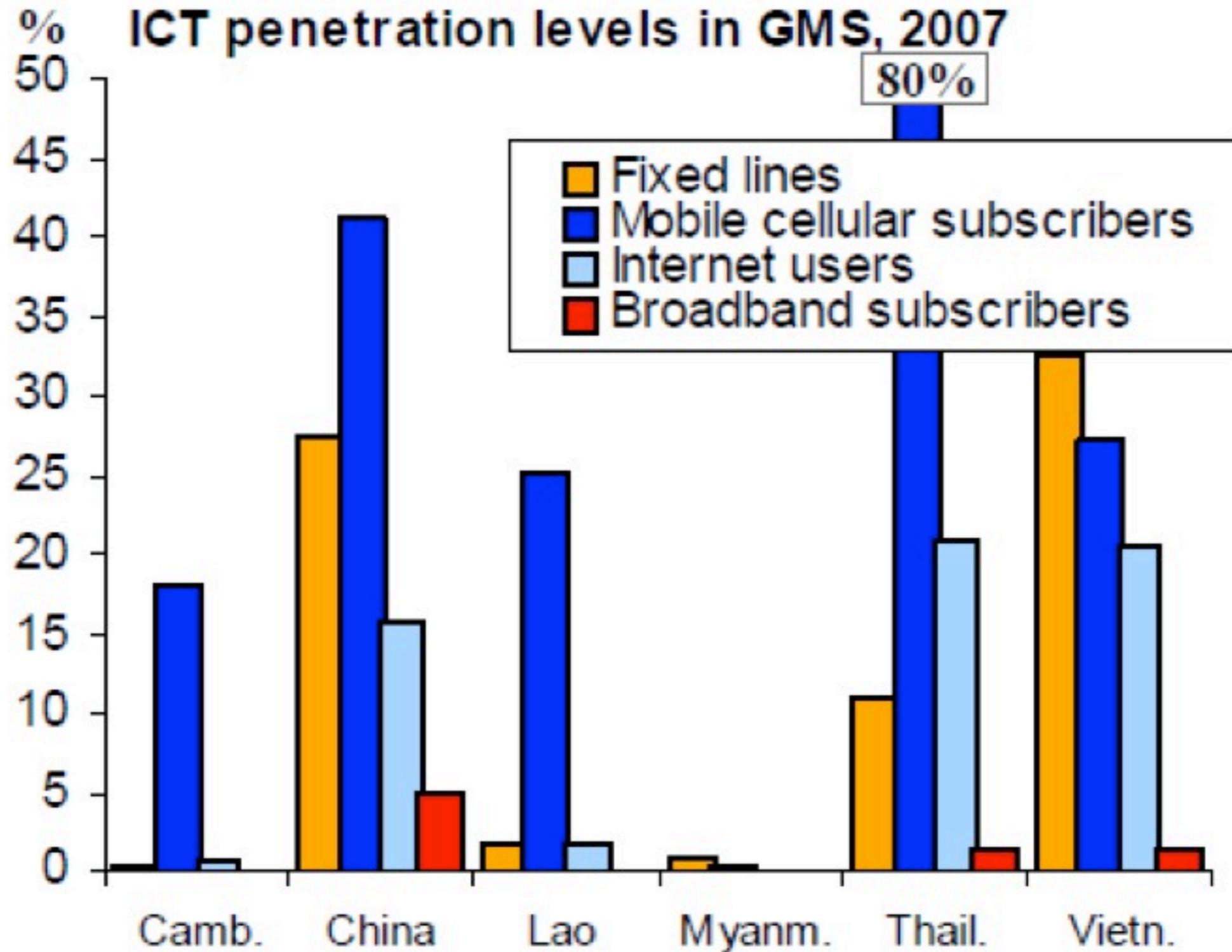
- **Connectivity**

  - IDRC

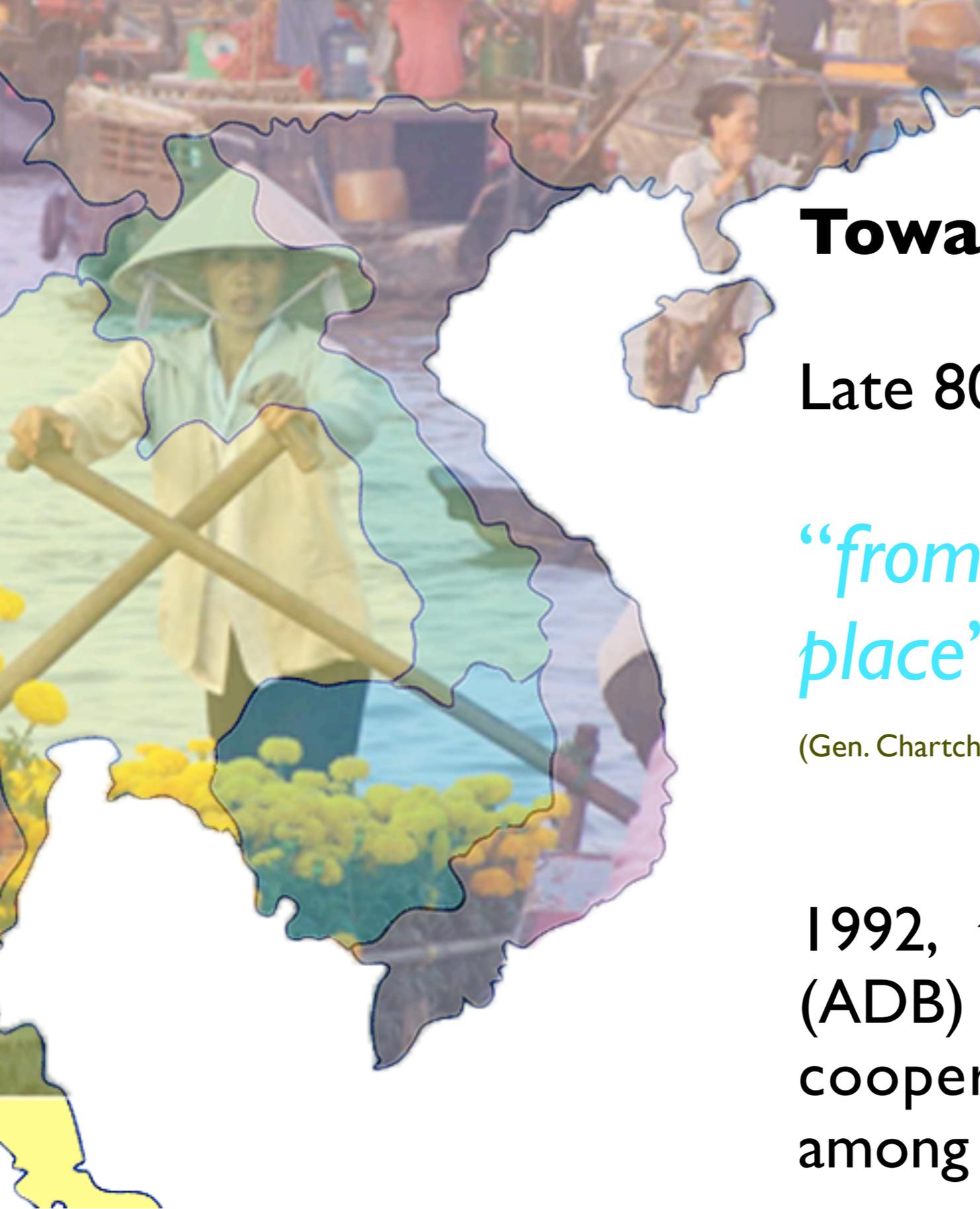
  - AARNET (Australia)

  - APAN (Asia-Pacific Network)

  - AI3/WIDE Project (Japan)



[http://www.itu.int/ITU-D/asp/CMS/Events/2008/GMS/docs/GMS\\_ITU\\_Present\\_2.pdf](http://www.itu.int/ITU-D/asp/CMS/Events/2008/GMS/docs/GMS_ITU_Present_2.pdf)



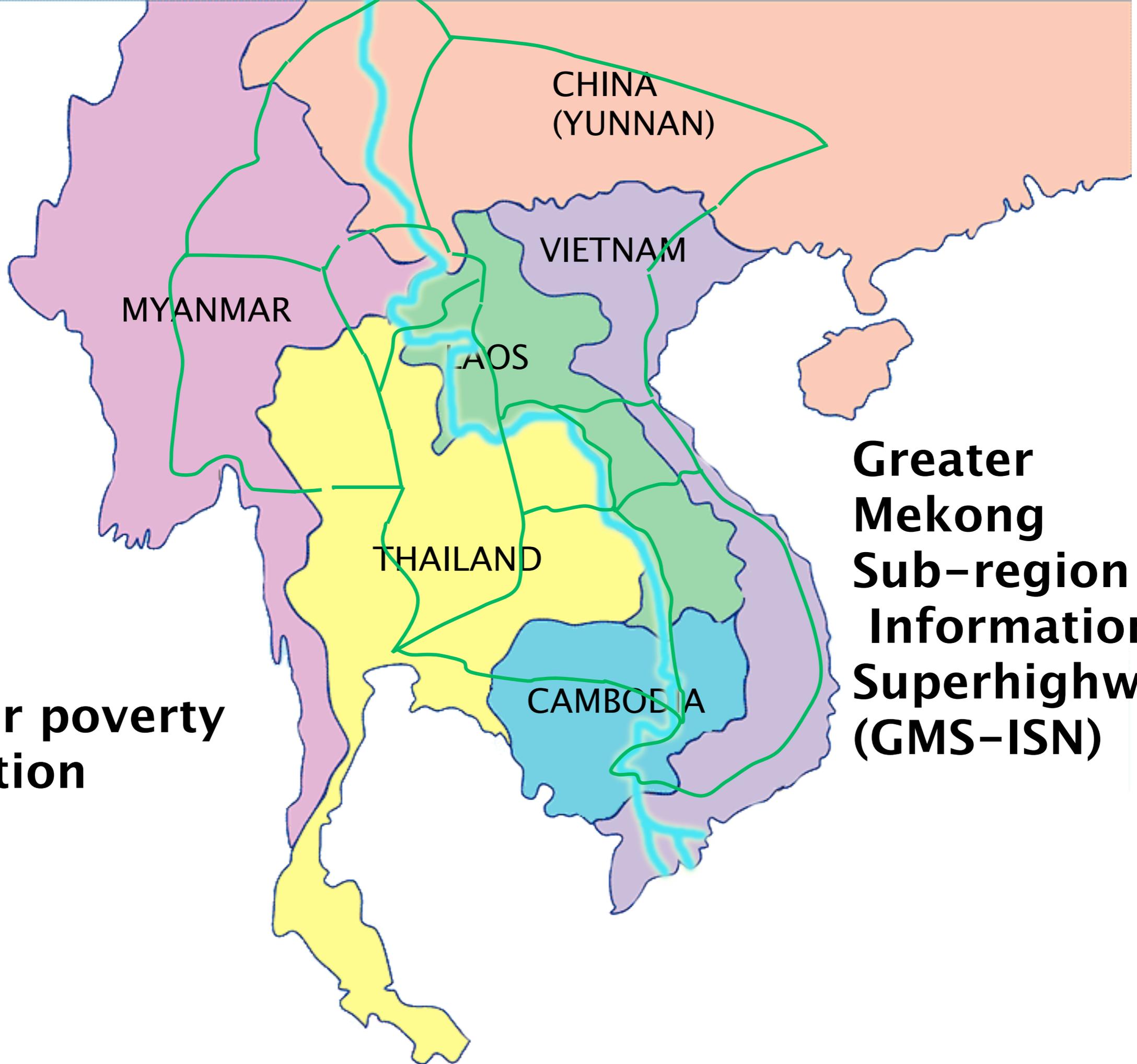
## **Towards GMS as a subregion:**

Late 80's,

*“from battlefield to a market place”*

(Gen. Chatchai Choonhavan, Thai PM during 1988-1991)

1992, the Asian Development Bank (ADB) launched subregional economic cooperation to enhance relations among the six countries.



**ICT for poverty reduction**

**Greater  
Mekong  
Sub-region  
Information  
Superhighway  
(GMS-ISN)**

# GMS-ISN

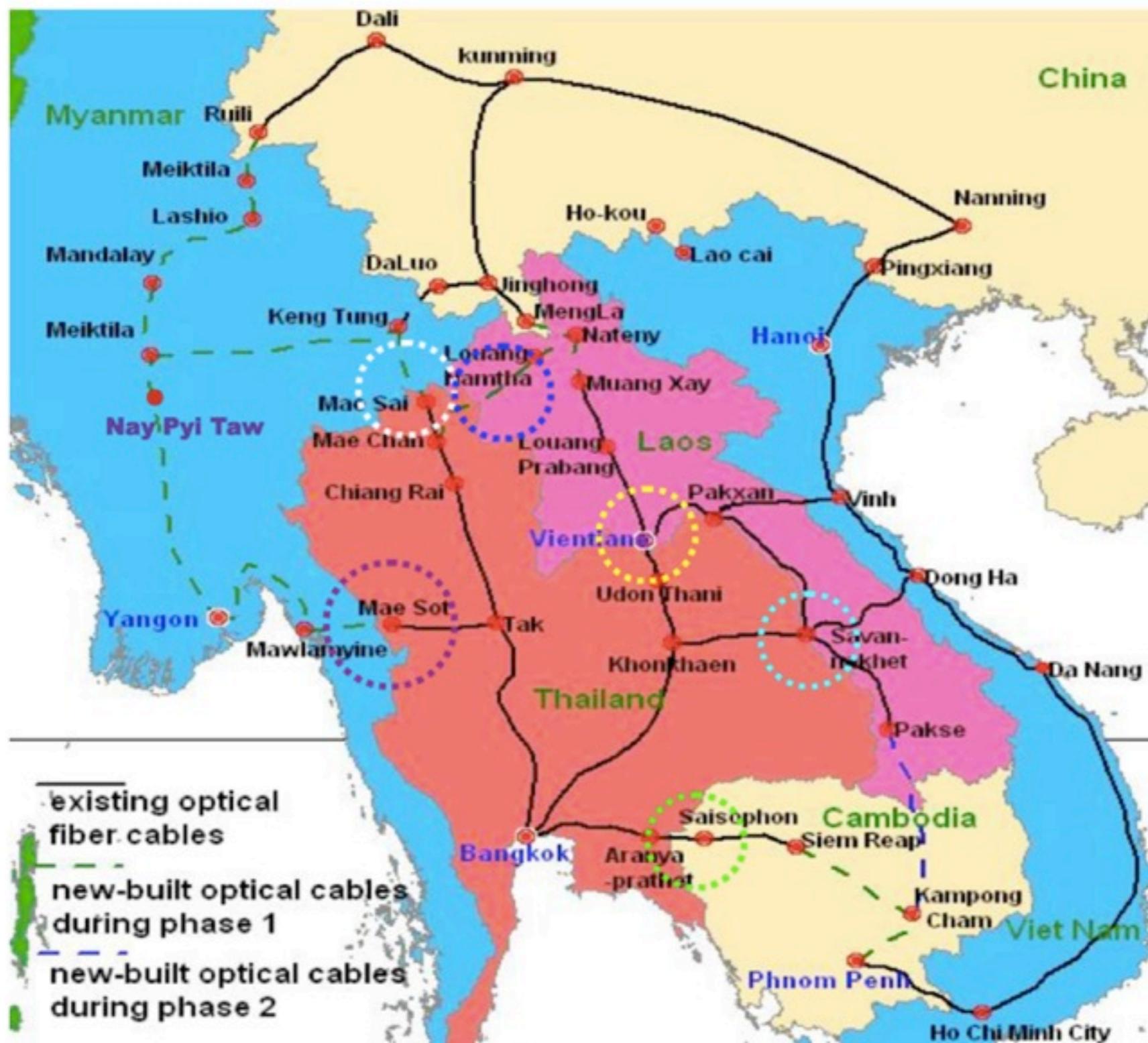
Phase I: Planning of GMS ISN and reach the common understanding and agreement

Phase II: Constructing the GMS-ISN first step and planned for the ready-for-service date to be on or before 2008

Phase III: Constructing the GMS ISN second step and planned the ready-for-service date to be on or before 2010

Phase IV: Developing all kinds of services and application based on the constructed network facilities developed in Phase II and III.

# Greater Mekong Sub-region (GMS) Information Superhighway



# Where is the GMS Information Superhighway in 2012?

Physical network completed in 2010

ADB direct financial support for the project ended in 2010. ADB has asked the GMS members to set up the **GMS ICT office** with funding from members.

Pricing scheme has not reached agreement by the government agencies involved

The network is not fully utilized for the subregion but only for bi-lateral traffic exchanges for both voice and data.

# Killer Apps for GMS Information Superhighway, if operational!

**VOIP**

**Mass Media**

**Entertainment**

**On-line Games**

Capacity building to for mass media, law enforcements as well as cultivating the Internet culture will increasingly be important.



Thank you

