

# ICT in Nepal

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# Agenda

- Overview of Nepal
- Organization & Role of Key Bodies
- National ICT Policies & ICT Status
- Some Constraints in ICT
- Suggestions to Enhance ICT in Nepal
- Area of co-operation



# Nepal in a Brief

- Total Area – 147181 sq. km.
- Total Population – 23.3 million
- Development Region – 5
- Zones – 14
- Districts – 75
- Municipalities – 58
- VDCs - 3915

# Geographical Division

	<b>Land</b>	<b>Population</b>
<b>Mountain</b>	<b>35%</b>	<b>7.45%</b>
<b>Hills</b>	<b>42%</b>	<b>44.46%</b>
<b>Terai</b>	<b>23%</b>	<b>47.88%</b>

# Geographical Division

<b>Contents</b>	<b>Percentage</b>
<b>Rural Population</b>	<b>88%</b>
<b>Population Growth Rate</b>	<b>2.23%</b>
<b>Agriculture Contribution to GDP</b>	<b>40%</b>
<b>Forest Area</b>	<b>39.6%</b>
<b>Incidence of Poverty</b>	<b>38%</b>
<b>Overall Literacy Rate</b>	<b>49.2%</b>
<b>Average Life Expectancy</b>	<b>61.9</b>

# Total Subscribers of Different Services in Nepal (as of 01/14/04)

Types of Services	Number of Subscribers
Fixed Line Telephone Subscribers (NTC)	386,267
Mobile Subscribers	59,882
Per-paid Mobile Subscribers	43,599
Internet & email Subscribers	30,000
Internet Users	150,000
WLL Subscribers	11,050
GMPCS Subscribers	270
Radio Paging Subscribers	12,650

# Total Subscribers' Penetration

Types	Density
Telephone	1.6 (National)
Telephone	0.4 (Rural)
Computer	1.07 (not Official record)

# Organization & Role of Key Bodies

- Ministry of Information & Communication (MoIC)
  - Policy making body for Telecommunication Sector, Radio and TV broadcasting, Postal, & Press.
  - Overall in-charge of telecommunication matter
- Ministry of Science & Technology
  - Policy making Body for Information Technology Sector
  - Implement Information Technology plans to enhance ICT field

# Organization & Role of Key Bodies

- Nepal Telecommunication Authority
  - Regulator body
  - Make guidelines for operators
  - Make guidelines for consumer protection
  - Gives suggestions for MoIC in the telecommunication matters
  - Does research on what telecommunication services to implement.

# Organization & Role of Key Operators

- Nepal Telecommunication Corporation
  - Key operator (backbone of ICT infrastructure )
  - Provide services on Fixed line (Basic line), Mobile communication, Internet
- United telecommunication Limited
  - WLL Technology in Kathmandu Valley
- STM Telecom Sanchar Limited
  - VSAT Technology for Eastern Nepal

# National ICT Policies

- Main ICT policy Components
  - **Telecommunication Act & Regulation**
  - **Telecommunication Policy 1999**
- IT Policy 2000
  - **Objective: to build knowledge base society & industries, increase employment**
  - **Strategy: encourage private sector, develop manpower, legalized E-commerce, promote foreign investment in IT, IT for rural development**
  - **Working Policy ( Legal & Institutional frameworks)**

# National ICT Policies

- National policy for ICT development
  - Included in 10<sup>th</sup> national plan (encouraging private sector, Implementing in Rural Area & socio-economic development)
  - Providing 40 telephone services to every 1000people

# ICT Infrastructure

- Telecommunication Infrastructure
  - Telephony
  - Internet Availability
- IT Infrastructure
  - IT Professional & Institute
    - High level professional – 1200
    - IT related University -4
    - Training institute – 177
  - IT Industries
  - Hardware & Software

# ICT Service Providers in Nepal

Services	Quantities
Basic Telephone (fixed line)	1
Basic Telephone (WLL)	1
Mobile Telephone	1
Internet Service Providers	22
Cable Internet	2
Radio Paging	8
VSAT Providers	10
Fax mail	6
Video Conferencing	1
GMPCS	2
Rural Telecommunication Services	1

# ICT Service Providers in Nepal

Services	Quantities
IT related University	4
Purposed IT Focused Universities	2
IT Training Institutes	177
Trading Business	200+
Software Companies	74+
Consultancy Services	81+

# Existing Regional Connectivity

Between Countries	Media	Type
Nepal-India	Terrestrial, Satellite	Direct
Nepal-Bhutan	-	Third Country
Nepal-Bangladesh	Terrestrial (not reliable)	Third Country

# Optical Fiber

- East – West Nepal Optical Fiber Project is under construction.
- Total Length will be 841 k.m.
- This project is under joint cooperation between Nepal and India.
- We are working on better utilization of this project. We do consider for better utilization of this network.

# Some Constraints in ICT

- Socio- Cultural
  - Brain drain
  - Digital divide
- Security
  - Cyber Laws
- Political
  - Long term vision
  - Instability

# Suggestions to Enhance ICT in Nepal

- ICT Vision
  - Adequate Manpower (training, higher study)
  - Long term policy (Infrastructure development)
- Technical Assistance from SASEC's
- Broadband Connectivity
- Research and Development Facilities

# Area of Cooperation

- Fiber Optic Connectivity Within the Region
- Sharing Resources & Knowledge
- Concept of Regional Gateway
- Regional Recognition & Establishment of Certification System



Thank you!