

DISASTER COMMUNICATIONS

-a challenging task in Nepal



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(The views expressed in this paper are of the speaker's and do not represent the opinions of the NTA or the Government of Nepal)

India

NEPAL

China



India

Location: 26° 22' to 30° 27' N Latitude
80° 4' to 88° 12' E Longitude

Area: 147,181 Sq Kilometer

Length: 885 Kms east to west

Breadth: 145 to 241 Kms north to south

Population: About 25 Millions

Geographical Divisions:

The Himalayan Region

- Altitude ranges from 5000m to 8848m
- Composed of Himalayas and snowy mountains
- Covers 15% of total area

The Hilly Region

- Altitude ranges from 300m to 5000m
- Consists of hills, green woods and fertile valleys
- Covers 68% of Total Area

The Terai (Plain) Region

- Altitude ranges from 300m or less
- Rich in agricultural production
- Covers 17% of total area

Administrative Divisions:

- 5 Development Regions
- 14 Zones
- 75 Districts
- 58 Municipalities & 3914 Village Dev. Committees

Agencies involved in Communications Sector

POLICY MAKER :

- Ministry of Information & Communications (MoIC)

REGULATORY BODY :

- Nepal Telecommunications Authority (NTA)
- Established in the year 1998

TELECOM OPERATORS :

- 2 Operators for Basic Telephone – Nepal Telecom & UTL
*UTL is providing service using WiLL Technology
- 2 Cellular Mobile Operators- Nepal Telecom & SNPL
- 2 Limited Mobility Service Providers – Nepal Telecom & UTL
- 1 Rural Telecom Service Provider-STM
- 38 Internet Service Providers
- 10 VSAT Network Providers
- 3 Radio Paging Operators
- 1 Local Data Network- SITA
- 3 GMPACS Service Providers

Telecom Status (Subscriber Base)*

- PSTN SUBSCRIBERS: **495,569**
- WILL SUBSCRIBERS- **105,885**
- CELLULAR MOBILE SUBSCRIBERS: **916,639**
- LIMITED MOBILITY SUBSCRIBERS: **19,843**
- GMPCS SUBSCRIBERS: **951**
- INTERNET SUBSCRIBERS: **50,000 (approx.)**
- VSAT USERS : **109**
- TEL. PENETRATION (Incl. Mobile): **5.86%**
- RURAL TEL. DENSITY: **0.4%**
- NO. OF VDCs WITH TELEPHONE SERVICE: **2,028**

* (As of Oct 2006)

Major Disaster Threats in Nepal

- Earthquake
- Landslides
- Floods
- Glacier Lake Outburst Flood (GLOF)
- Avalanche

Government Agencies involved in Disaster Management ⁽¹⁾

- Ministry of Home Affairs
- Ministry of Information and Communications
- Ministry of Water Resources
- Ministry of Housing and Physical Planning
- Ministry of Health
- Ministry of Finance
- Ministry of Defense
- Ministry of External Affairs

Government Agencies involved in Disaster Management (2)

- Ministry of Forest
- Ministry of Agriculture
- Ministry of Education
- Ministry of Environment, Science and Technology
- Ministry of Women and Social Welfare
- Ministry of Supplies
- Ministry of Public Works and Transport

Government Agencies involved in Disaster Management ⁽³⁾

- The Secretariat of National Planning Commission
- Nepal Army
- Nepal Police
- Department of Mining and Geology
- Department of Meteorology
- Department of Roads
- Department of Forest and Soil Conservation

Non-Government Agencies involved in Disaster Management

- Nepal Red Cross Society (NRCS),
- Nepal Scout (NS)
- Disaster Prevention Technical Center (DPTC),
- Nepal Geological Society (NGS),
- National Society for Earthquake Technology (NSET)

International Agencies involved in Disaster Management⁽¹⁾

- Japan International Cooperation Agency (JICA)
- Asian Disaster Reduction Center (ADRC),
- Asian Disaster Preparedness Center (ADPC),
- United Nations Development Program (UNDP),
- International Center for Integrated Mountain Development (ICIMOD),
- United States Agency for International Development Mission to Nepal (USAIDMN),

International Agencies involved in Disaster Management₍₂₎

- International Red Cross Society (IRCS),
- United Mission to Nepal (UMN),
- Cooperation for American Relief Everywhere (CARE),
- OXFAM,
- Redd Barna,
- World Food Program (WFP),
- Save the Children Fund (SCF),
- Technical Cooperation of the Federal Republic of Germany (GTZ),
- Lutheran World Service (LWS).

Agencies involved in Disaster Communications

- Ministry of Information and Communications
- Nepal Telecommunications Authority
- Telecom Service Providers (Voice)
 - Nepal Telecom (NDCL)
 - United Telecom Ltd. (UTL)
 - Spice Nepal Pvt. Ltd. (SNPL)
 - STM Telecom Sanchar Pvt. Ltd.
 - Avco International Pvt. Ltd.
 - Constellation Pvt. Ltd.
 - I4 Technologies Pvt. Ltd.

Role of MoIC

- As per the Telecom Act 1997, the Ministry can issue necessary directives to NTA in connection with the diversification, extension and regularization of the Telecommunications Service in line with the Telecommunications policy of the country,
- The Act has also granted power to the Government of Nepal to operate the Telecommunications Service by itself or cause it to be operated.

Role of NTA

- NTA, in view of the policy and guidelines of the Government, can issue necessary orders or directives to the Licensee and it shall be the duty of the licensee to comply with such orders or directives.
- The license issued by NTA, to the voice service providers, has provisioned for the national emergencies that the Licensee shall, within twelve months of the effective date of the Licence, submit to the NTA a plan setting out the priorities and procedures it will apply in the event of a disaster or national emergency and shall update the plan when requested by the NTA.

Role of the Telecom Service Providers

- Set up the communication infrastructure as per the directives of Government & the Authority during the time of natural calamities,
- Provide the services in the disaster affected areas for the rescue workers,
- Submit a plan setting out the priorities and procedures it will apply in the event of a disaster or national emergency to NTA and update it when requested by the NTA.

Emergency Communications Available in Nepal

- Global Mobile Personal Communications by Satellite (GMPCS)
 - used mostly by INGOs, NGOs, trekkers, rescue workers, etc.
- Ku-band VSAT Terminals
 - deployed by NDCL & STM to serve the rural community and easy to install.
- Walkie Talkies
 - used mostly by Nepal Army & the Police.

Disaster Preparedness Plan⁽¹⁾

- Measures related to national policy and planning for making institutional arrangement, providing legal framework, adopting national policy and plan on disaster management.
- Measures related to geological, hydrological and meteorological hazard assessment and environmental engineering studies.
- Infrastructure specific and hazard specific preparedness measures.
- Risk assessment for development planning.

Disaster Preparedness Plan⁽²⁾

- Measures related to strengthening fire fighting capabilities in fire prone areas.
- Measures related to awareness raising, training, rehearsal, simulation activities.
- Measures related to establishment of disaster management information system and stock piling of emergency supply materials.
- Establishment of documentation centre on disaster activities.

Disaster Preparedness Plan⁽³⁾

- Policies on the role of NGOs, local community, private sector and also people's participation especially women and socially disadvantaged groups.
- Incorporation of environment impact assessment for disaster reduction development planning.
- Promotion of regional and sub-regional cooperation between countries expecting same types of hazards.

Challenges in Disaster Management⁽¹⁾

- Poor public awareness,
- Low literacy rate,
- Difficult and undeveloped physical infrastructure,
- Unplanned settlement,
- Lack of political commitment,
- Slow decision making process,

Challenges in Disaster Management₍₂₎

- Lack of cooperation and coordination among various disaster management related agencies and their behavior indifference,
- Inadequate funds and resources, and
- Lack of modern technology, especially Early Warning System.

Areas of assistance needed in Disaster Management⁽¹⁾

- Conduct trainings, workshops and seminars to exchange ideas and transfer know-how on disaster management,
- Build up human capacity for disaster management, focusing on the proper use of the communication devices,

Areas of assistance needed in Disaster Management⁽²⁾

- Identify appropriate technologies for emergency communications,
- Develop a common framework among the member countries for preparing National Emergency Telecommunication Plan.

THANK YOU !



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