Disaster Management Framework Development in Pakistan
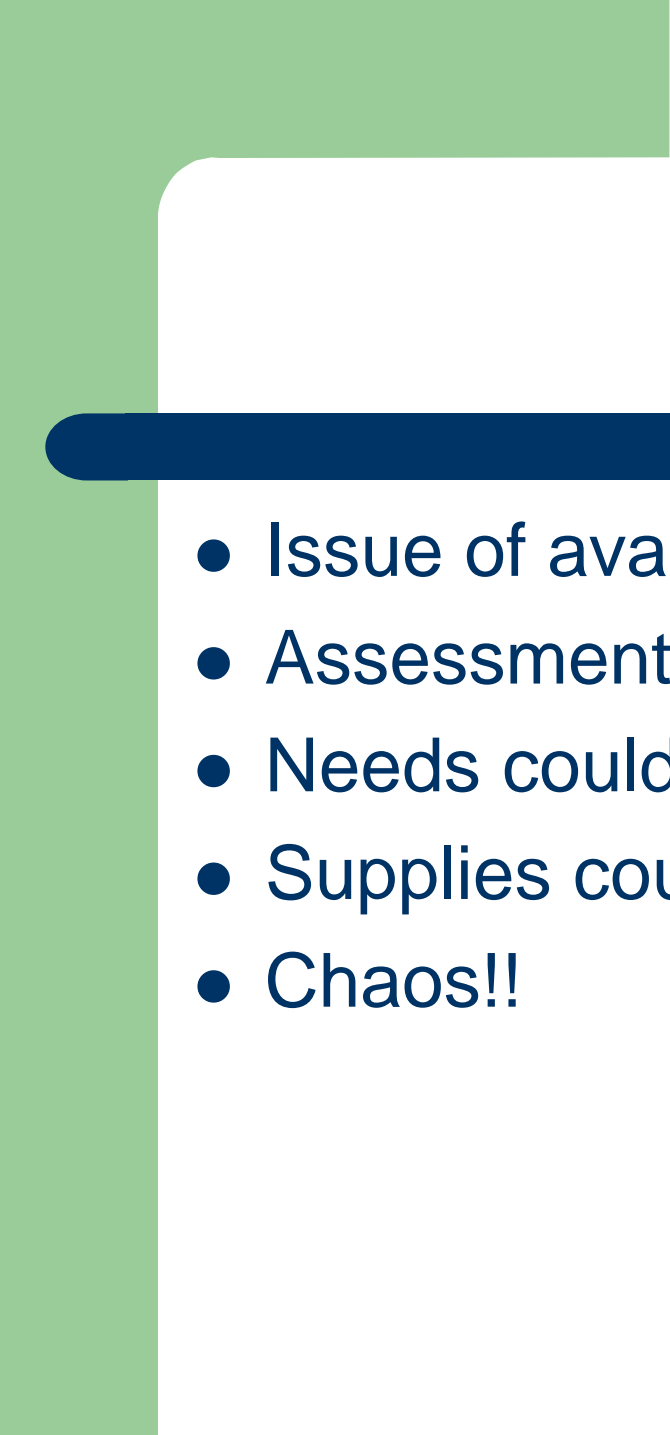
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background

- Asia Pacific Community has experienced some of the biggest disasters in the history recently.

- The two most recent disasters being Tsunami and 8/10 earthquake in Pakistan.

- Colossal damages during the incidence and its aftermath resulting in unprecedented loss of human life, properties and infrastructures in the most difficult terrains.

8/10 Earthquake

- Telecommunication infrastructure was severely damaged
- Distribution network (OSP) almost perished
- No communication for relief/ rescue operations.
- Non-availability of alternate communications means required in such situations made rescue/relief operations less effective.

- Issue of availability of accurate information
- Assessment of damages
- Needs could not be determined
- Supplies could not be directed where needed
- Chaos!!

- Dead :73,338 Source Federal Relief Commissione

- Others claim that 150,000+

- Besides damage to the Infrastructure and Building

HEAVY DAMAGES TO TELECOMMUNICATION INFRASTRUCTURE

SEVEN YOUTHFUL WORKERS LAID THEIR LIVES & 49 SUFFERED SERIOUS INJURIES

DAMAGE ASSESSMENT TO PRIORITIZE RECOVERY EFFORTS

MOVE OF EMERGENCY RECOVERY TEAMS BY HELI LIFTS AND BY ROAD FOR RAPID REPAIR AND DEPLOYMENT OF

- **MICROWAVE LINKS**

- **OPTICAL FIBER CABLE**

- **EXCHANGES**

- **OUTSIDE PLANT BY LAYING AERIAL CABLES**

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DEPLOYMENT OF HF AND VHF RADIO SETS IN MUZAFFARABAD, BAGH AND RAWALAKOT AREAS

PROVISION OF MORE THAN 150 EMERGENCY DEDICATED PHONE LINES TO ARMY AND OTHER AGENCIES TAKING PART IN RELIEF OPERATIONS

DEPLOYMENT OF SCO CDMA (WLL) SERVICE IN AFFECTED AREAS AND PROVISION OF 100 X FREE WLL CONNECTIONS TO AGENCIES TAKING PART IN RELIEF OPERATIONS

FREE INTERNET SERVICES AT MUZAFFARABAD, RAWALAKOT AND BAGH

DEPLOYMENT OF SATELLITE BASE STATIONS IN REMOTE AREAS

MOBILE WORKSHOPS TO ASSIST HELPING ORGANIZATIONS AND AFFECTEES FOR LIMITED REPAIR OF TELECOM EQUIPMENT

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STEEL JACKS USED TO SUPPORT DAMAGED TELECOMM BUILDINGS TO KEEP THEM INTACT TILL ALTERNATE ARRANGEMENTS

PLACEMENT OF PREFABRICATED SHELTERS TO SHIFT TELECOM EQUIPMENT FROM THE DAMAGED BUILDINGS

DEPLOYMENT OF NEW GENERATOR SETS AT AFFECTED LOCATIONS IN THE OPEN TO KEEP THE EXCHANGES FUNCTIONAL DURING PROLONGED POWER OUTAGES

OSP REVIVAL

MORE THAN 4500 TELEPHONES RESTORED WITHIN TWO WEEKS TIME IN MUZAFFARABAD, BAGH AND RAWALAKOT SECTORS

SHIFTING OF DANNA MW SITE

> DUE TO CONTINUOUS STRUCTURAL CHANGES IN DANNA FEATURE, DANNA MICROWAVE REPEATER SITE FEEDING THE BADLY HIT JHELUM VALLEY WAS CLOSED

> 65 Km OFC LAID TO RESTORE DIGITAL EXCHANGES IN JHELUM VALLEY

DANNA TOP SIDE VIEW

ITU Assistance

- 25 Inmarsat Terminal (capable of providing basic telecommunication services)

- 40 Data terminal (RBGAN) to provide internet and telemedicine connectivity to the rescue teams operating in the affected areas.

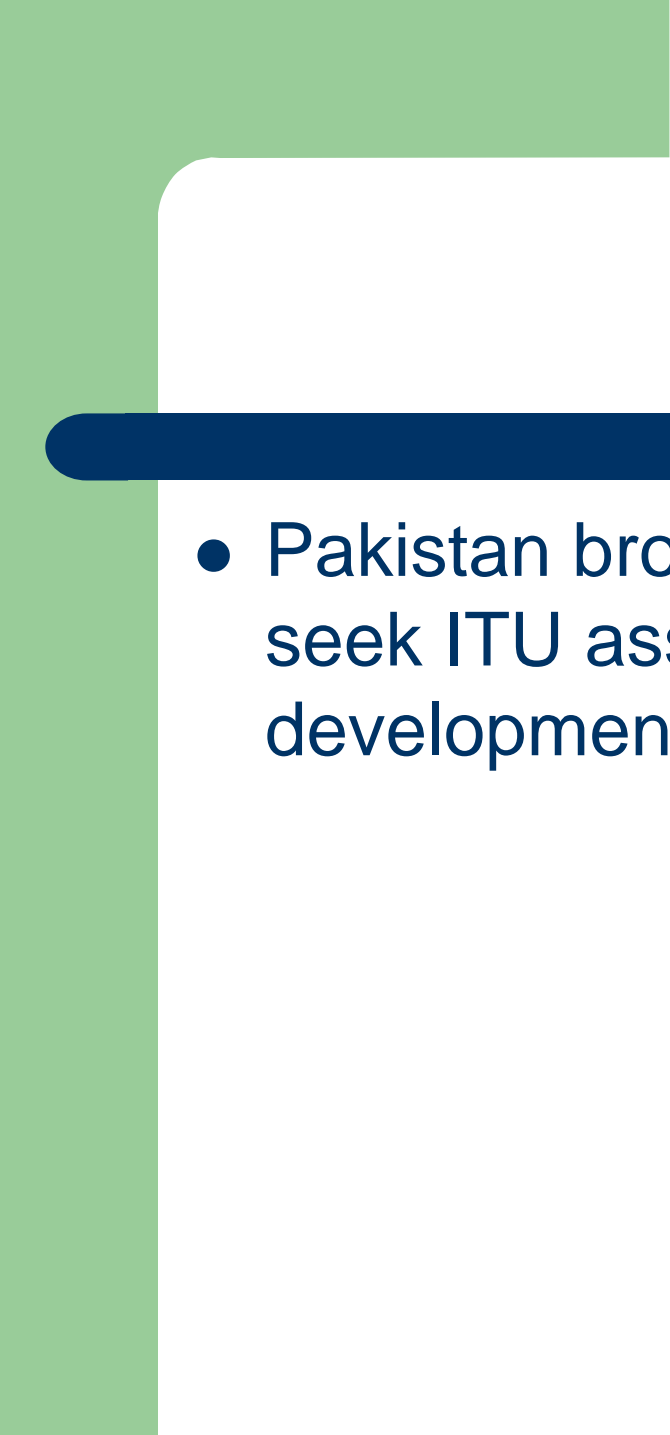- expert mission to provide technical assistance

Other International Organizations' Assistance

- Thuraya
  - Thuraya Phone were used to establish PCO in the affected areas.

- BT
  - British Telecom provided assistance of 08 Very Small Aperture Terminals (VSAT) terminals which were used by SCO to restore telecommunication link in the much needed areas.

Was this a sufficient assistance?

The need was felt to have global frame work for the cooperation among the international community.

- Pakistan brought proposal in Doha WTDC to seek ITU assistance on Disaster framework development through study question

Role of ICT in mitigating disaster effects

- ICT in pre-disaster awareness and preparedness.
- ICT in post-disaster prevention and recovery.

Role of ICT in mitigating disaster effects

- When disaster events occur, getting the best out of hi-tech systems and infrastructure requires all-level cooperation.
- Impacts can be reduced by preparing appropriate advance operational plans, establishing warning systems, training emergency response personnel, educating people, etc.
- Emergency warning systems and disaster relief need to use the telecommunication facilities in setting up warning systems.
- Interoperability and cooperation among agencies and teams are important.

Role of ICT in mitigating disaster effects

- Cooperation
  - Acknowledge the importance of cooperation for disaster relief between national and local governments. ICT can develop the disaster relief telecommunication network systems that enable information transfer among cooperation.
  - Recognize the importance of cooperation among the members to work together in disaster management.
  - Promote the cooperation among members for sharing information on regional and international level.
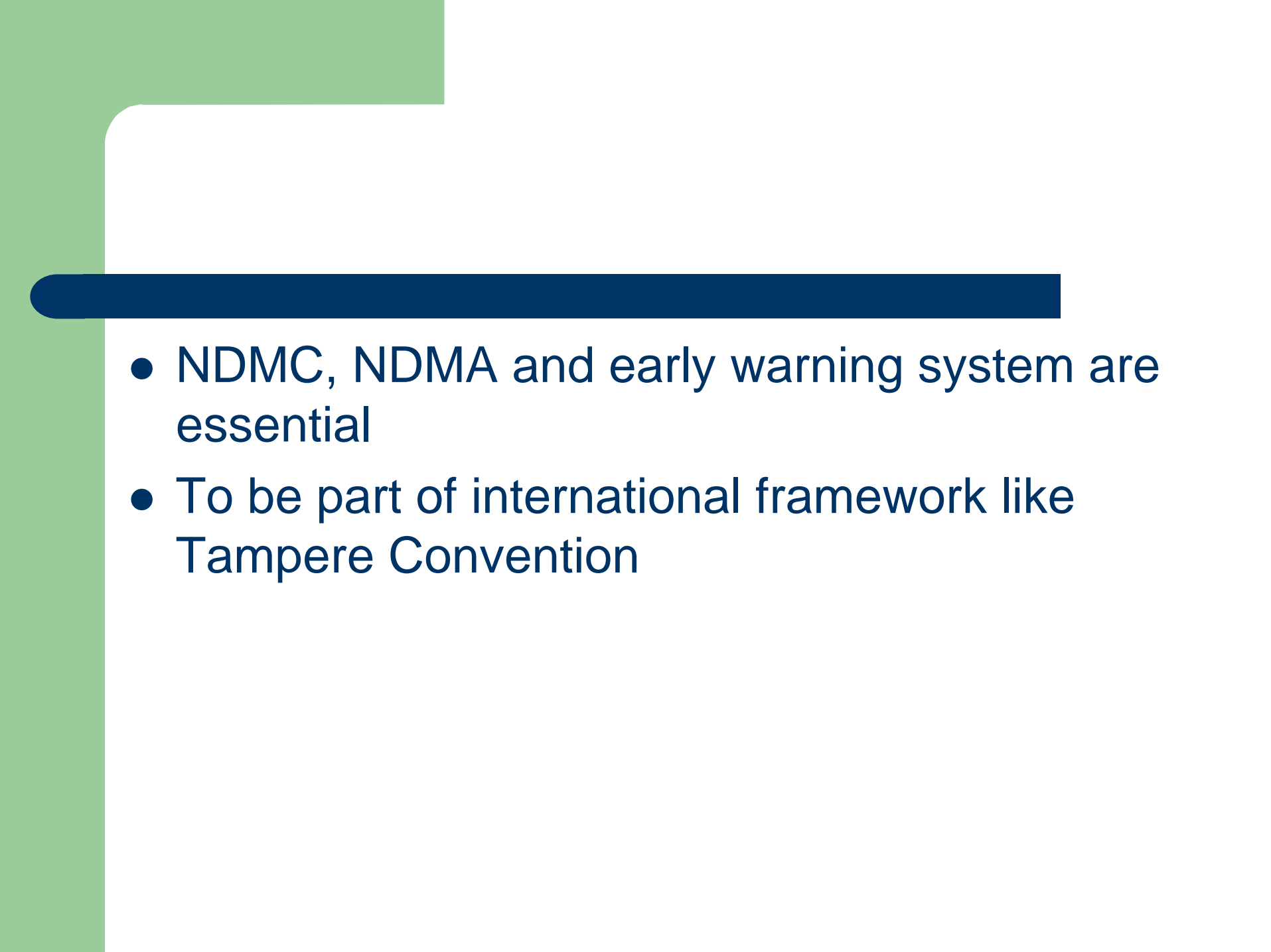
Role of ICT in mitigating disaster effects

- Building disaster relief telecommunications system in each country and promoting human resource development through training to educate in case of the future warning and relief is essential.

Role of ICT in mitigating disaster effects

- Establish appropriate technical standards and recommendations for disaster early warning and relief system.

- Recognizing that telecommunication systems must be accompanied by high level of community awareness.

Lessons learnt

- With the help of ITU and other international organization, communication links were restored with affected areas

- RBGAN data terminal were useful. We could send first hand information about injured from field to the hospitals in major cities through e-mail and hospitals were ready to receive patients with required medicine.

- NDMC, NDMA and early warning system are essential
- To be part of international framework like Tampere Convention

National Disaster Management Framework

- National Disaster Management Ordinance passed
- National Disaster Management Commission established (NDMC)
- National Disaster Management Authority (NDMA) --- Serves as Secretariat and implementer of the policies framed by NDMC
- NDMA to be established at provincial, district and municipal level
- Guidelines for all stake holders regarding disaster risk reduction plans, strategies and plans
- For details visit www.ndma.gov.pk

Thank You