Earthquake 2005
Recovery and Reconstruction
Earthquake – 8 Oct 2005

Nine Districts

1. MANSHERA
2. BATAGRAM
3. SHANGLA
4. ABBOTTABAD
5. KOHISTAN
6. MUZAFFARABAD
7. NELUM
8. BAGH
9. RAWALAKOT

Depth: 10 km
Pakistan suffered its worst ever natural disaster on the morning of 8 October 2005.

An earthquake measuring 7.6 on the Richter scale struck the mountainous area of 28,000 square kilometers of Pakistan’s Khyber Pakhtunkhwa (KP) and Azad Jammu Kashmir (AJK).

The death toll was over 73,000 of which around 17,000 were school students.
Magnitude of the Disaster

- Around **3.5 million persons** were left homeless, of which at least **60%** were women and children
- **600,000 houses, 800 health facilities and 6,200 education institutions** destroyed
- Roads measuring **2300 kms** destroyed
- **92 bridges** rendered useless
- **Communication systems and public offices** were destroyed and **agricultural land, livestock and forests** were partially or fully lost
Few Glimpses
Few Glimpses
Few Glimpses
Mega Earthquake – A Wake Up Call

• As a result of 2005 earthquake Disaster Management System went through evolution process in Pakistan and is now well established

• Earthquake was initially handled by Federal Relief Commissioner (FRC)
  • A national effort was launched using all national resources
  • Incorporated international support

• ERRA (Earthquake Reconstruction and Rehabilitation Authority) was immediately established on 24 Oct 2005

• NDMA was raised in 2007 through an ordinance and was later provided legal framework in 2010 through an act of Parliament
Building Resilience to Disasters

- Pakistan has a Road-map to address existing vulnerabilities to hazards and ensure that future development is resilient to disasters
- Roadmap is in the form of National DRR Policy and ten years National Disaster Management Plan (NDMP)
- Prevention of losses through recurring disasters is now a priority area
  - Prevention - Prevent those hazards which can be prevented
  - Mitigation - Minimize the impact of hazards which cannot be prevented
  - Preparedness – Develop response capacity to face residual threats
# Earthquake Profiles

<table>
<thead>
<tr>
<th>Country</th>
<th>Mountainous terrain</th>
<th>Magnitude</th>
<th>Deaths</th>
<th>Population Affected</th>
<th>Houses Damaged</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAKISTAN</strong></td>
<td>Mountainous terrain</td>
<td>7.6</td>
<td>73000</td>
<td>3.5 m</td>
<td>600000</td>
</tr>
<tr>
<td><strong>NEPAL</strong></td>
<td>Mountainous terrain</td>
<td>7.8</td>
<td>4916</td>
<td>0.88 m</td>
<td>37,656</td>
</tr>
</tbody>
</table>
Build Back Better
Recovery & Reconstruction Experiences
Policy Guidelines

• Converting the adversity into an opportunity

• Humanitarian approach

• Follow highest standards of rehabilitation and reconstruction and ensure policy of “Build Back Better”

• Build institutional framework based on highest standards of professionalism, integrity, teamwork and transparency

• Owner-Driven Housing Reconstruction In Situ
Policy Guidelines

Major Sectors of intervention & Cross-Cutting Themes

Hardcore Sectors
1. Housing
2. Education
3. Health
4. Water & Sanitation
5. Governance
6. Power
7. Telecommunication
8. Transportation

Soft core Sectors
1. Livelihood
2. Social Protection
3. Environment (Facilities)

Cross Cutting Themes
1. Gender Equality
2. Disaster Risk Reduction
3. Environment (Safeguards)
Housing Recovery & Reconstruction Experiences
Recovery & Reconstruction Experiences

- Out of 611,059 destroyed/damaged houses identified in the Damage & Eligibility Assessment Survey, 100% rebuilding/repair has been completed
- Over Rs.86 billion disbursed among homeowners for reconstruction
- Houses rebuilt/repaired are compliant with seismic-resistance and other standards
- A culture of seismic-resistance construction has been established in affected areas
Recovery & Reconstruction Experiences

• Capacity building of homeowners, partner organizations and other stakeholders conducted — helping reconstruction and creating a pool of skilled labour, A total of 504,897 people trained in social mobilization and 256,547 given technical training

• Women’s empowerment promoted through provision of house reconstruction grants and capacity building

• 10 Data Resource Centers established in AJK and KPK, and a housing Complaints Cell established for public grievance redress
Recovery & Reconstruction Experiences

• An owner-driven approach to housing reconstruction is effective in allowing large-scale implementation in a short period of time, and also promotes efficiency.

• A supplementary community validation mechanism for determining grant eligibility must be in place to avoid complications and grievances in the damage assessment.

• Awareness-raising efforts need to be made to ensure all home construction is in compliance with safety standards, in particular for seismic-resistance construction.
Homeowners and other stakeholders need to be given technical assistance on how to carry out construction, good techniques, what materials to use, etc. This can be done directly, or in the case of larger communities indirectly through partner organizations.

Construction techniques and solutions (e.g. to ensure seismic-resistance construction) should - as far as possible - be derived locally, thereby ensuring they are suited to local conditions and based on readily available materials.

The focus should be on achieving end goals through flexible approaches, rather than prescribing a one-size-fits-all model.
Effort should be made to ensure that women’s needs are addressed and their participation promoted in home reconstruction. Indeed, housing construction can be utilized as a mechanism to promote women’s empowerment.

Homeowners should be provided financial support to construct/repair their homes. They should be required to sign MOUs committing them to use the money for the intended purpose.

Disbursal systems should be simple and easily monitorable; payment through bank account could be one effective option, and - where needed – support should be provided to promote opening of bank accounts.
Recovery & Reconstruction Experiences

- An easily accessible and responsive grievance redress system should be established
- Housing reconstruction strategies should be designed to cater to differences between urban and rural areas
- It’s good to outsource - involvement of diverse partners in the program brings credibility and augments the capacity of the organization spearheading the reconstruction drive
- Key messages to communities through effective media campaign with sustained messages to avoid speculation about the policy
Govt Buildings & Urban Development
Recovery & Reconstruction Experiences
Reconstruction of various govt infrastructure in the closer vicinity to each other can greatly facilitate public access.

Urban development should be considered as a long term development exercise, rather than simply as reconstruction.

Urban development requires adequate funding, human resource capacity, implementation mechanisms, etc. A phased implementation approach would be appropriate and options such as hybrid models involving the private sector/NGOs/INGOs should be explored.
• Options for public-private partnerships can play a vital role in development
• It is important to ensure that immediate and medium-term needs of affected residents are addressed
• Urban development will often involve dislocation of large numbers of people and removal of property. The concerns and needs of such affactees should be addressed from the outset and plans made to adequately relocate and/or compensate them
Power, Telecommunication & Transport
Recovery & Reconstruction Experiences
Reconstruction of power, telecommunication and transport sectors can contribute significantly to wider economic growth and should be completed in the early time frame.

Expansion should be planned in the reconstruction phase of power, telecommunications and transport sectors.

Efforts should be made to ensure power supply, telecommunications connections and road access to all remote populations.
Recovery & Reconstruction Experiences

- Planning, design, project approval and funding mechanisms should be expedited to ensure minimal delays in starting construction - particularly in the case of power and road construction projects.
- Bottlenecks in implementation such as shortage of skilled labour and delayed payments should be addressed quickly to maintain progress and reduce time and cost-over runs.
Education Sector
Recovery & Reconstruction Experiences

- The enrolment percentage of students in the schools is 30% higher compared to pre-earthquake period
- 51% increase in classrooms
- 91% increase in labs / library facilities
- 290% increase in administration offices of schools
- 50% increase in school toilets
Livelihood Recovery Experiences
Livelihood Experiences

• Livelihood Cash Grants Programme implemented, benefiting 290,210 households, 27% of them female-headed: extended for further 6 months to cover most vulnerable 22,807 female-headed households

• Community Investment Fund set up to implement projects like Community Livelihood Rehabilitation Plans (CLRPs) and 1,789 CLRPs schemes were formulated

• In any livelihood rehabilitation strategy it is vital to ensure that the immediate needs of people who have lost their source of income are met. This could simply entail the distribution of cash grants (i.e. support does not have to be related to work)
Livelihood Experiences

- **Medium-term measures** are needed to bring about timely restoration of some livelihoods, the focus should also be on the long-term measures, such as, creating an enabling environment for sustainable job creation and economic growth.
- A **holistic approach to livelihood rehabilitation** should be taken, encompassing ‘traditional’ sources such as agriculture, but also encouraging diversity and development of new sources of income, e.g. through enterprise development.
- **All interventions for livelihood restoration** should be based on sustainable use of natural resources and environmental protection.
Community participation in planning of interventions for livelihood restoration is vital.

Specific efforts should be undertaken to promote participation by vulnerable groups and especially women.

Government departments/agencies associated with livelihoods, e.g. agriculture, livestock, forestry departments etc, should ensure ownership and sustainability.

Enterprise development promotion should address all aspects such as skills development, market linkages, access to credit, etc.
Recommendations
Recommendations

• *Pakistan has the expertise in recovery and reconstruction and this can be shared with Nepal*

• *During reconstruction of damaged heritage, involvement of people in reconstruction be ensured*

• *Increase public awareness about multi hazard risk management*

• *Multi hazard risk assessment should be carried out at micro level*

• *Decentralize Disaster Response Mechanism to the District / Town Nazims*
Recommendations

• Build capacity of professionals, government officials and locals
• Develop and enforce simple building codes for rural and urban areas
• Mainstream risk reduction in development planning of known potential hazard e.g. in known seismic zones
• Holding International workshops, conferences to share the lessons and best practices on regular basis
Glimpses After Reconstruction

Social Welfare Complex Muzaffarabad
Glimpses After Reconstruction
Glimpses After Reconstruction
Glimpses After Reconstruction
Glimpses After Reconstruction
THANKS
Challenges

- Changing the mindset from traditional reconstruction
- The treacherous mountainous terrain, Harsh weather limiting the construction season
- Local capacity to support massive recovery due to absence of industrial base and construction industries
- Building institutional capacity for comprehensive recovery framework
- Winning confidence of national and international implementing partners and affected people
- Building culture of transparent institutional mechanism
Opportunities

- Better quality of living also resulting in poverty reduction
- Employment / Job Opportunities
- Enhanced Livelihood generation
- Intervention in agriculture & livestock
- Improvement in cottage industries
- Improved construction trends
- Improved communication infrastructure and access to market
- Safer educational institutions with quality education
- Easy access to health services resulted in improved health status
Opportunities

• Provision of safe drinking water under WATSAN Projects
• Improvement in governance sector services to common people
• Gender mainstreaming thus allowing women folk to play their role in developmental activities
• Improvement in Power & Telecommunication sectors to facilitate coordinated response to disasters
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Video Clip