



Disaster Response Cooperation

(Case of 2015 Nepal Earthquake)

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Gorkha Earthquake, 2015

- As a result of the earthquake that struck Nepal on [25 April and 12 May 2015](#), 8970 people dead, 22, 302 people are injured.
- On Saturday, [25 April 2015 at 11:56 local time](#) a 7.6 magnitude earthquake struck Barpak of Gorkha District, about 76 Km northwest of Kathmandu .
- The catastrophic earthquake was followed by more than [450 aftershocks greater than magnitude 4.0](#).
- Four aftershocks were greater than [6.0 Magnitude](#).

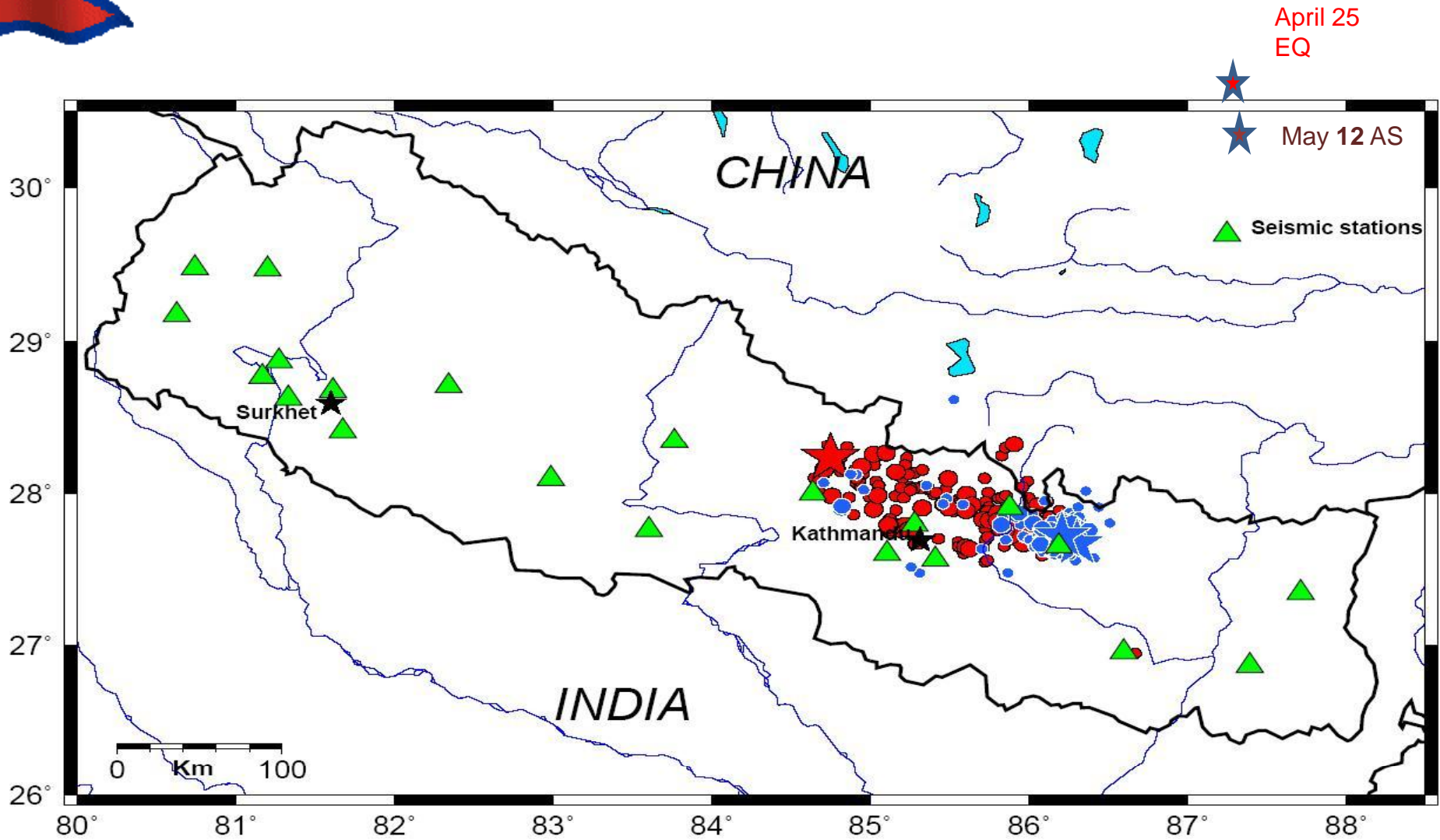


Gorkha Earthquake, 2015

- 8 Million people, one third population of Nepal have been affected.
- 31 districts affected out of them 14 districts were declared 'crisis-hit' for the purpose of prioritizing rescue and relief operation.
- More than 800, 000 houses, school buildings and heritage sites were partially or fully damaged.
- The estimated loss was \$9.3 billion (more than one third of the GDP)



Earthquake and After Shocks, more than 475



Death Tolls 8,970

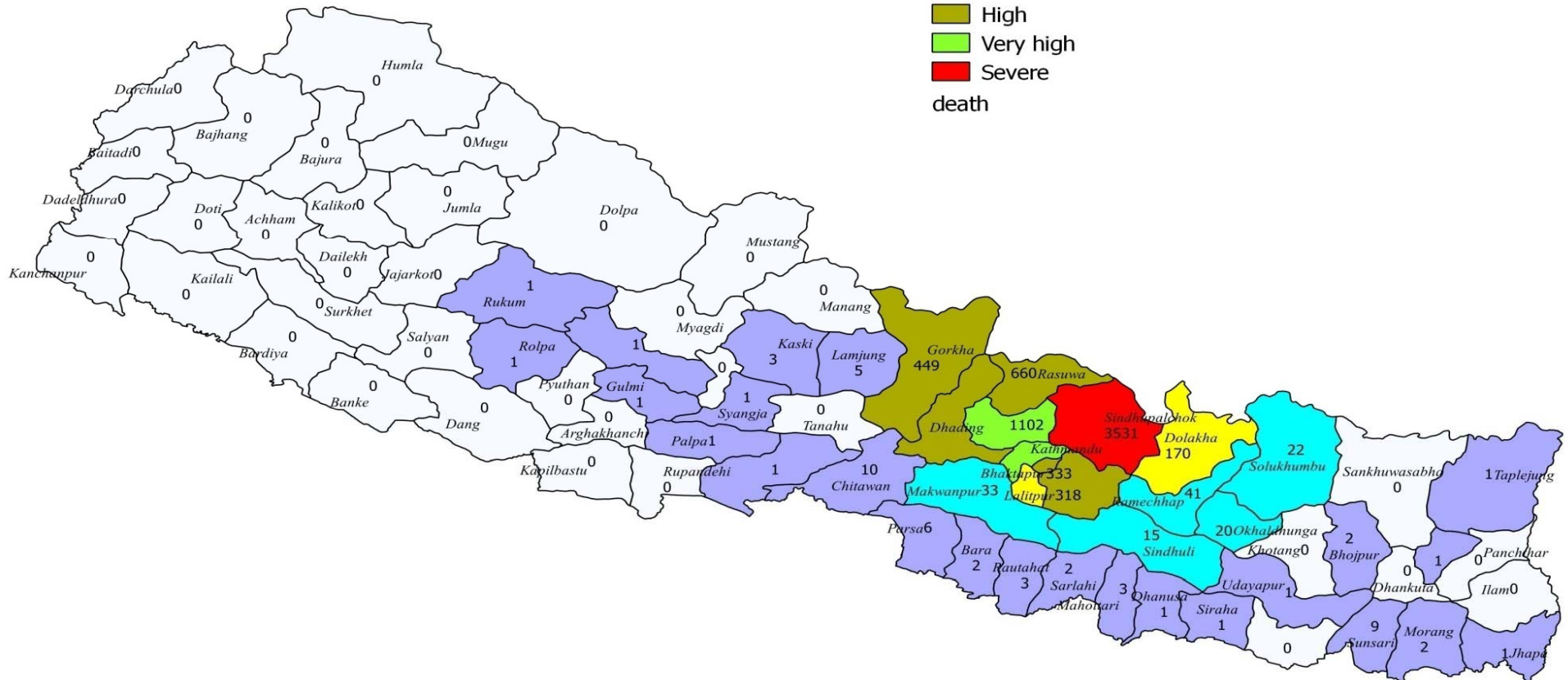


Total Death Map

| | |
|---------------|-----------|
| 0 | None |
| 1-10 | Very Low |
| 11-50 | Low |
| 51-200 | Medium |
| 201-1000 | High |
| 1001-3000 | Very High |
| 3001 to above | Severe |

Legend

| |
|--------------|
| Total Death |
| None |
| Very Low |
| low |
| Medium |
| High |
| Very high |
| Severe death |



Injured People



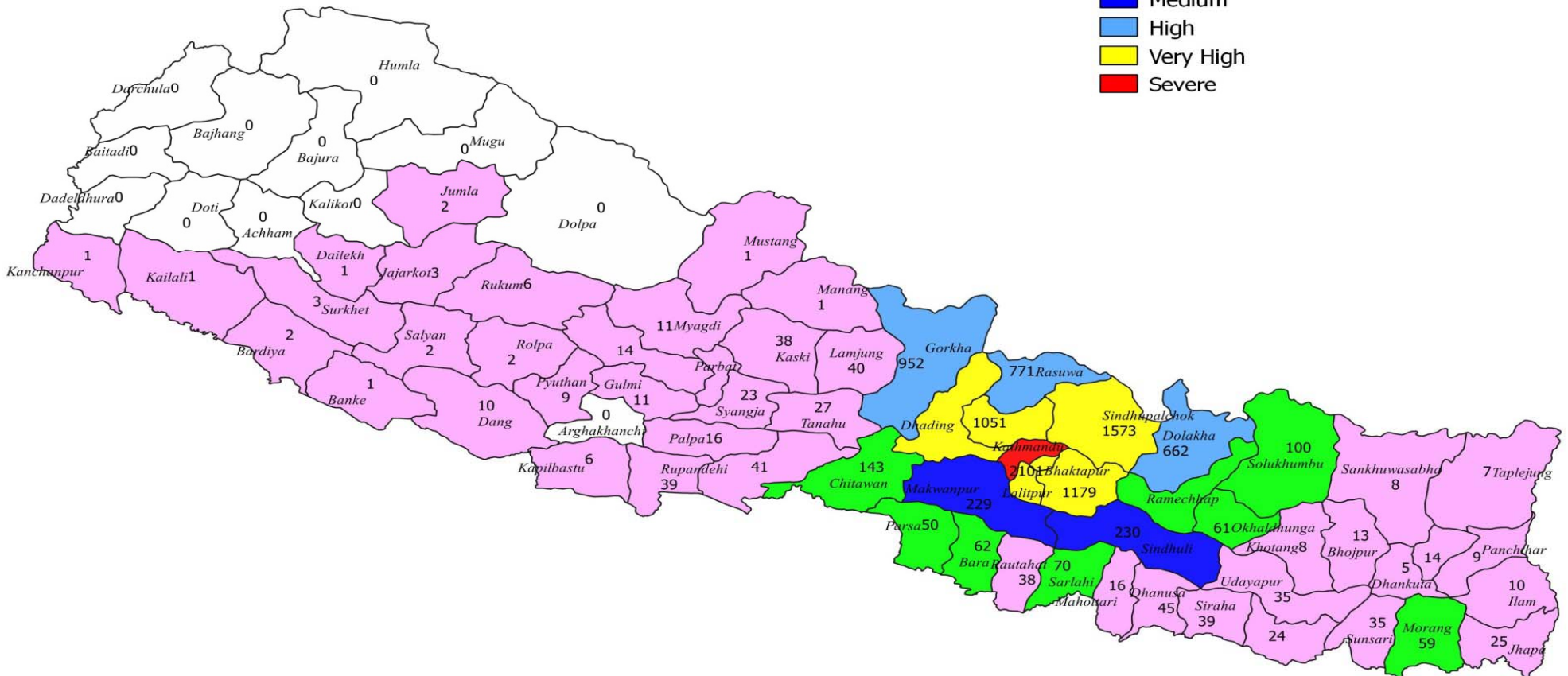
Total Injured Map

| | |
|-----------|-----------|
| 0-0 | None |
| 0-49 | Very Low |
| 50-200 | Low |
| 201-500 | Medium |
| 501-1000 | High |
| 1001-5000 | Very High |
| 5001-8000 | Severe |

Legend

Total Injured Map

| |
|-----------|
| None |
| Very Low |
| Low |
| Medium |
| High |
| Very High |
| Severe |





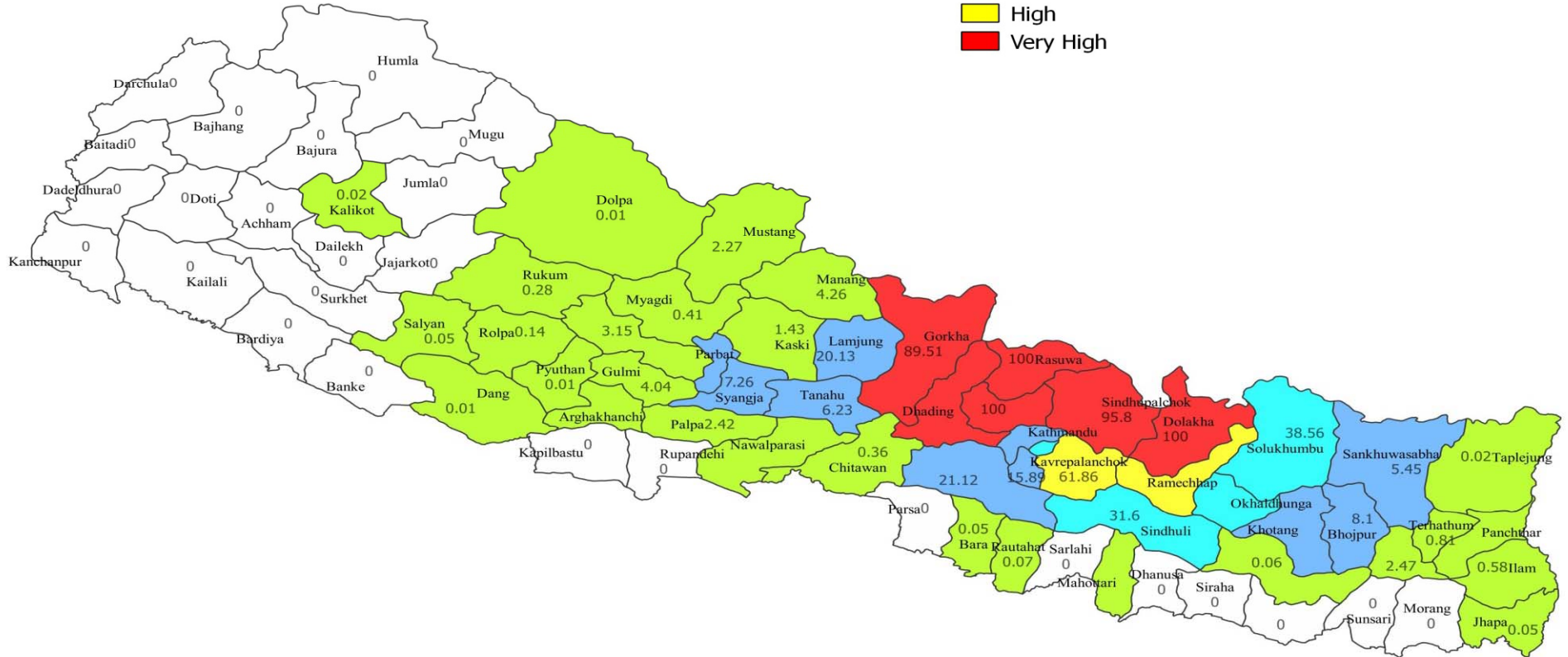
Damage of Houses

Private House Fully Destroyed

Legend

Private House Fully Destroyed

- None
- Very Low
- Low
- Medium
- High
- Very High





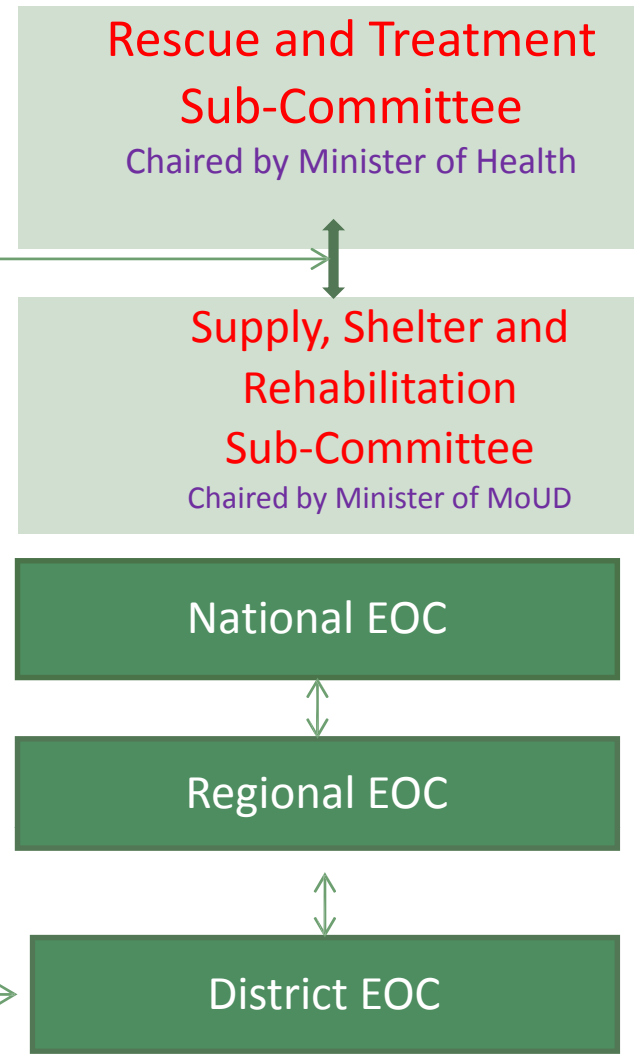
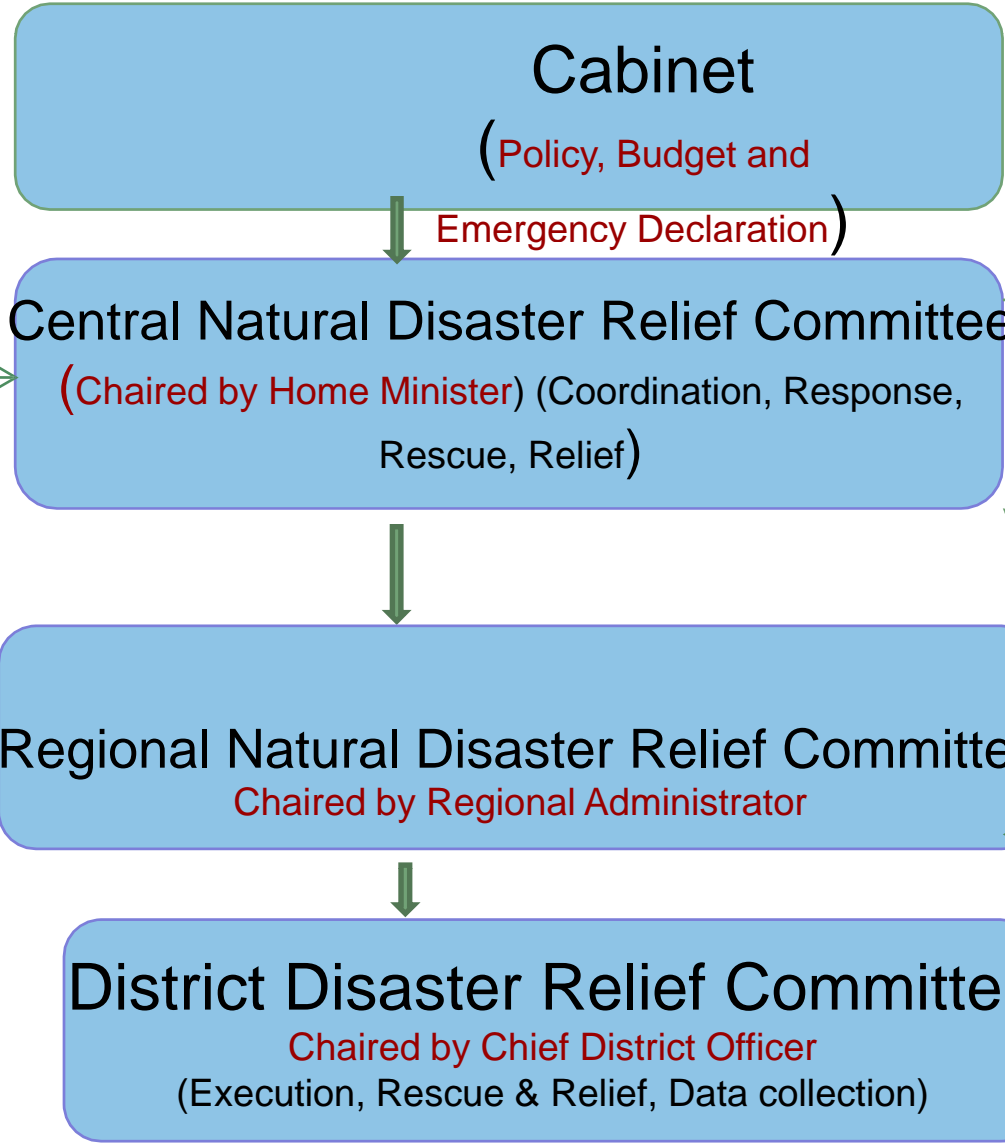
Response of Nepal Earthquake

- [NEPAL EARTHQUAKE LIVE FOOTAGE and RESCUE.mp4](#)

Institutional Framework (in line with 1982 Act)



Central Natural Disaster Relief Fund
Prime-Minister Natural Disaster Relief Fund

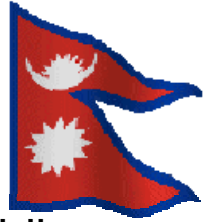




Immediate Response

- **Activation of National Emergency Operation Centre (NEOC) at 4th level,**
- **Immediate Search and Rescue Operation started,**
- **Activation of DDRC and DEOC at earthquake affected districts, mobilisation of district level security forces for search and rescue,**
- **Standby Hospitals and health facility,**
- **Immediate Relief Distribution started in the leadership of Local Administration,**
- **Appeal from the Prime-Minister,**
- **Post-disaster law and order maintained,**
- **Collaboration and Cooperation with local humanitarian agencies including Red-cross volunteers,**
- **Community people involvement along with security forces,**

Higher Government Authority Activation



NEOC Building

- **Meeting of CNDRC** after **two hours**, at **14.00 hrs**, made several policy decisions including
 - Accelerate SAR and Relief operations timely and effectively,
 - Standby Free Medical treatment,
 - Activation of all level of government and non-government agencies,



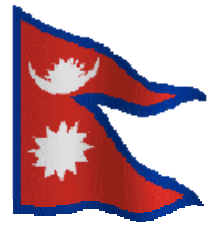
Higher Government Authority Activation



NEOC Building

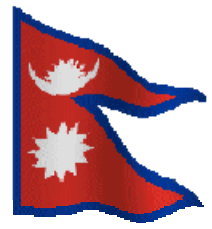
- Several consecutive CNDRC meetings were held to take necessary decisions and recommendation to the Council of Ministers.
- **Secretaries Meeting**, lead by Chief Secretary, activate all level government machinery.
- Establishment of **Central Command Post**, headed by Home Secretary.





Key Decisions of CNDRC

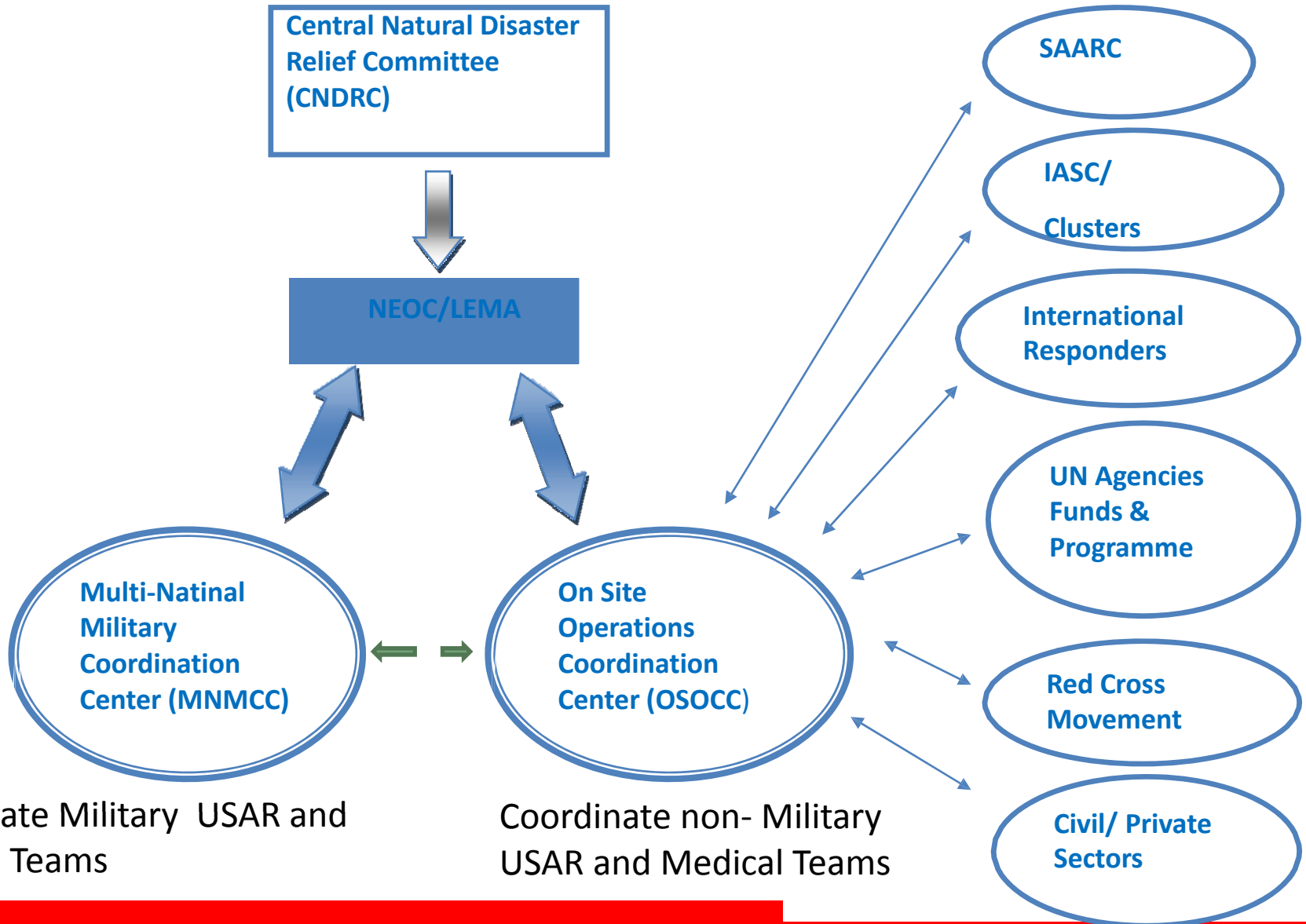
- All the **hospitals would remain open for 24 hours**, all government, community and private hospitals should provide **free service** to the people injured by earthquake.
- All **media** and communication services should deliver information and notices.
- 14 districts were declared as **districts of crisis**.
- As the preliminary assessment showed bigger losses which was beyond the national capacity to response, the CNDRC recommended to the Council of Ministers for **seeking international support**.



Emergency Declaration

- Government of **Nepal declared emergency** in 14 crisis-hit districts for one month period,
- **Chief District Officer (CDO) had given special authority**, as per prevailing law to handle basic utility services and to make search, rescue and relief operation effective,
- **Basic utility services and market were made functional and regulated accordingly.**
- **Search, rescue operation and relief distribution were expedited.**

National Coordination Mechanism for SAR





HUMANITARIAN COORDINATION STRUCTURE

Humanitarian Coordinator

Cluster level
Coordination

Central Natural
Disaster Relief
Committee

IASC Principals (HCT)

Chair: HC

Members: AIN, FAO, IFRC, IOM,
OHCHR, OCHA, UNMIN, UNDP,
UNFPA, UNHCR, UNICEF, WFP, WHO,
Standing Invitees, ICRC

Main Humanitarian Country Team. The Principal IASC is a strategic decision making body with representation of Heads of Agency level. Once in 2 months

IASC Operational

Chair: OCHA

Members: Cluster Leads, IFRC,
IOM, NRC, UNHCR, SC, UNDP, UNFPA,
UNHABITAT, UNICEF, WFP, WHO, ICRC
(Obs.) Inter Agency Standing Committee

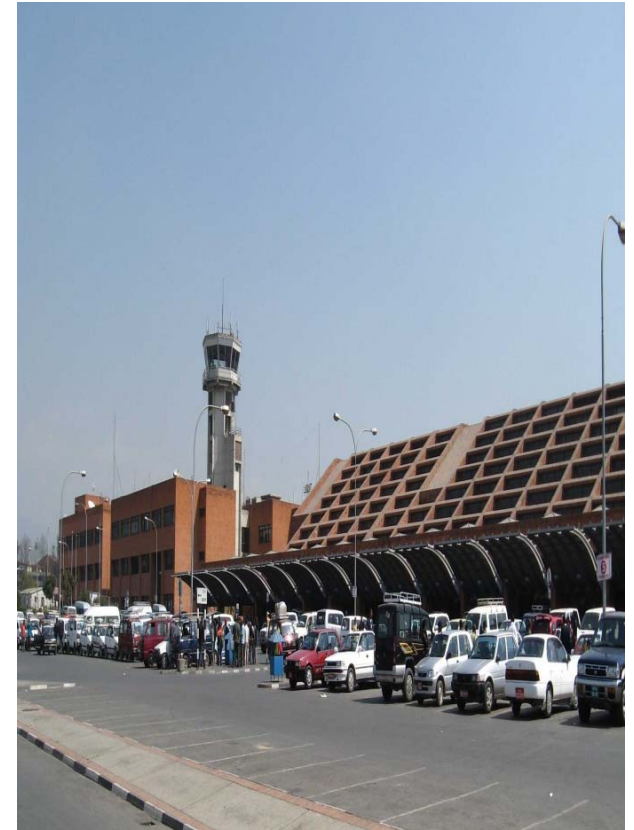
1. Camp Coordination & Camp Mgmt
2. Education
3. Shelter
4. Health
5. Nutrition
6. Protection
7. Water, Sanitation & Hygiene
8. Food Security
9. Telecomm
10. Logistics
11. Early Recovery (as a network)

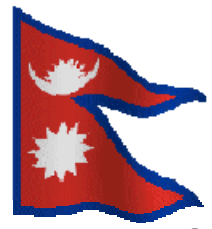
Government Cluster Focal Points
and DDRC



International Assistance

- Various arrangements were made to facilitate incoming of the International humanitarian actors:
24hrs opening of Immigration offices, Visa fee exemption, Customs clearance-model agreement etc.
- On Site Operation Cooperation Centre (OSOCC) were activated in the Humanitarian Staging Area (HAS) of Tribhuvan International Airport,
- Multi-National Military Coordination Centre (MNMCC) at Nepalese Army and OSOCC were made operational under the policy leadership of NEOC, as per the NDRF and INSARAG Guidelines.

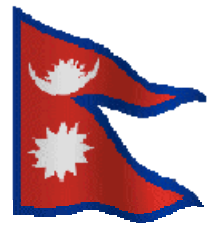




International Assistance

- More than 1400 medical professionals from 78 International Medical teams were mobilized in coordination with Ministry of Health,
- After a week of devastating quake, CNDRC meeting on 2 May 2015 acknowledged the efforts of International SAR Teams and requested to make their exit plans.
- Ministry of Foreign Affairs facilitated International SAR Teams and relief support.





National Search and Rescue

- **66069 Army, 41776 Police, 24775 Armed Police Force, 22500 Civil Servants were mobilized for search, rescue and relief operation**
- **All together 7762 people were rescued by helicopters and 4689 were rescued by land transportation**
- **National Security Forces were heavily involved rescuing buried and wounded people from rubble**
- **All injured and rescued people were given immediate free medical treatment**

Helicopter Mobilization

| Helicopters of | Numbers | Flights |
|-----------------------|----------------|----------------|
| Nepalese Army | 10 | 1958 |
| Private Sector | 6 | 745 |
| Indian Air Force | 13 | 1177 |
| USA | 7 | 287 |
| Chinese | 3 | 74 |
| Total | 39 | 4241 |
| Pokhara Base Flights | | 458 |
| Grand Total | | 4699 |



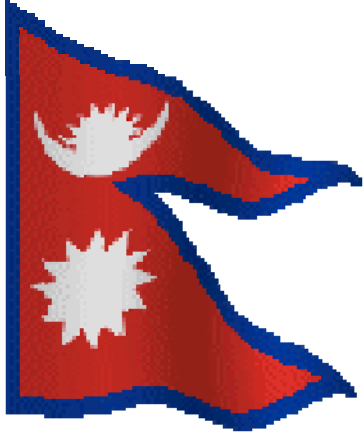
Immediate Search and Rescue Operations



| | | | |
|---|---------------------------|--------|--------------------------------------|
| Live rescue from collapsed buildings | Individual | 16 | |
| Search and Rescue Team - National | Civil Servant | 22,500 | Related Ministries and Organisations |
| | Nepal Army | 66,069 | |
| | Nepal Police | 41,776 | |
| | Arm Police Force | 24,775 | |
| | Government Health Workers | 9,500 | |
| | Private Sector | 4,000 | |
| Search and Rescue Team - International | Country | 34 | |
| | Persons of the Countries | 4,521 | |
| | Canine | 141 | |
| International Health Team | Groups | 78 | MoH |
| | Total Individual | 1,400 | |

Search and Rescue





Challenges and lessons learning



Positive Aspects of Response

- 7000 rescued by Air Ambulance from most difficult terrain,
- Effective free treatment of emergency in both private and public hospitals,
- overall situation of law and order was maintained
- Smooth supply of drinking water, restoration of communication,
- Successfully managed a safe passage to the exodus of around one million affected people from Kathmandu within one week
- Probable epidemic outbreak was fully controlled,



Challenges

- Coordination among the stakeholders
- Management and Mobilization of relief materials
- Access to remote areas for rescue and relief,
- Temporary settlement of displaced
- Provision of High-Tech Equipments for search and rescue
- Debris management
- Tools and equipment and sufficient skills to dismantle the damaged structures.
- Identification of victims and data management



Challenges

- Selection of **appropriate caring of children** with good faith who lost their parents and guardians.
- Challenges for immediate **repair of rural roads** and for regular supply,
- **Collection of integrated field information and dissemination**
- Lack of office space for the government operations as significant **number of government buildings were damaged / destroyed**



Lessons learnt

- Strict implementation of building code.
- Strengthen the **capacity** of National Search and Rescue Team specially focusing for **Security forces**.
- **Assured international supports** in Search and Rescue, relief and recovery.
- Need of extra **Helipads in Rural Areas**,
- Emergency additional **warehouses** and adequate stockpiling of appropriate supplies and equipment
- **Pre-list and provision of Relief Materials**



Lessons learnt

- **One window system** is important for distribution of relief materials in **remote areas**.
- Expansion of EOCs in all districts (even upto Municipality level),
- Need of GIS based integrated Disaster Management Information System (with remote sensing, satellite images and SAT Phone)
- Volunteer Mobilization in organized way through appropriate agency,
- **Awareness should follow a community based approach,**
- Strengthen the capacity of Community level SAR Teams.

SEARCH & RESCUE.....



LIVE RESCUE







Dead Body Collection

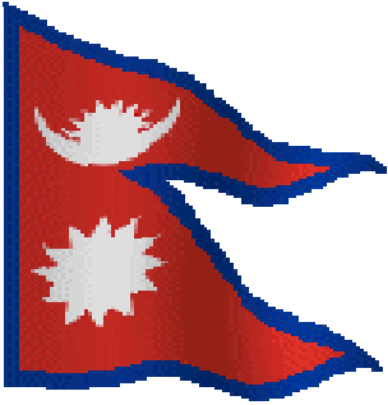


HELICOPTER RESCUE



INTERNATIONAL ASSISTANCE





Thank You

Any Questions