

Shelter Cluster Recovery and Reconstruction Working Group

28th October



Meeting Agenda

1. Shelter Cluster Update
2. Housing Reconstruction: Institutional Structure
3. CBS Update on Assessment
4. NSET Detailed Damage Assessment
5. Shelter Cluster Monitoring Assessment
6. Q&A Document
7. RRWG Workplan
8. RRWG Workplan Updates
9. AOB



SHELTER CLUSTER UPDATE



Latest figures

 **612,000+**

Households received CGI or its equivalent in Cash

 **670,000+**

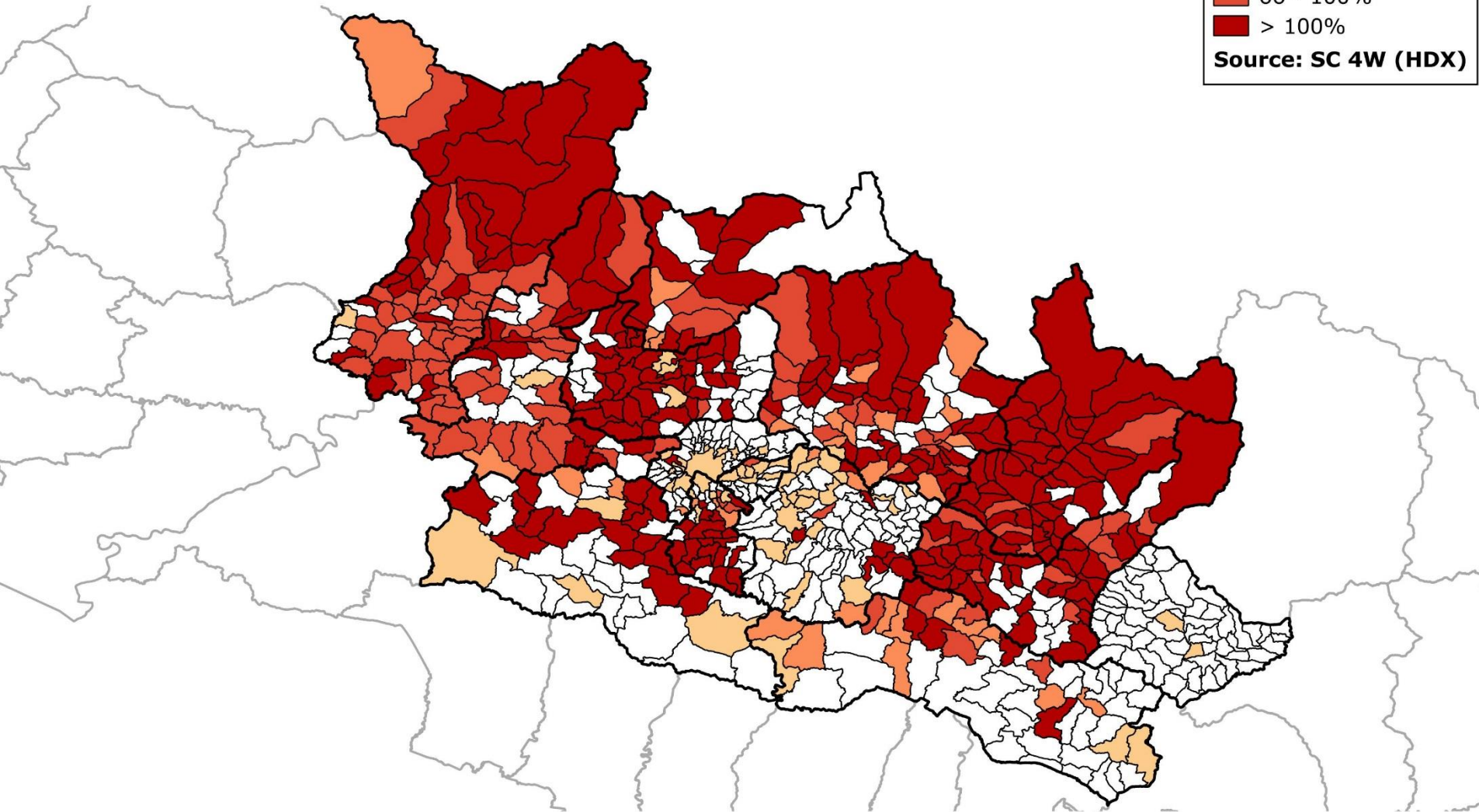
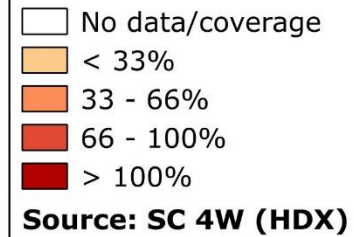
Households received a Tarpaulin or a Tent

 **712,000+**

Houses were damaged by the earthquake



Cash and CGI Coverage

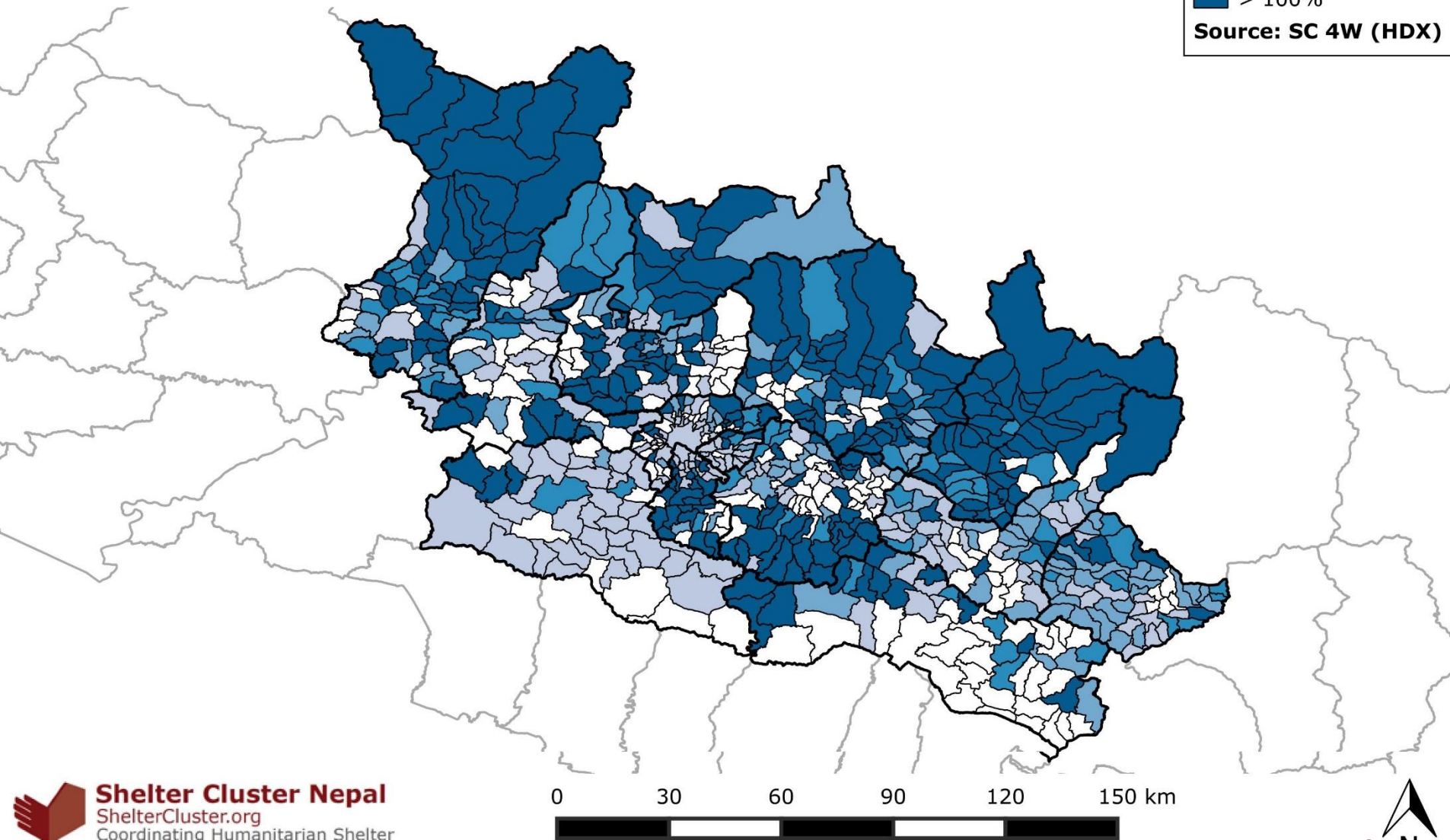
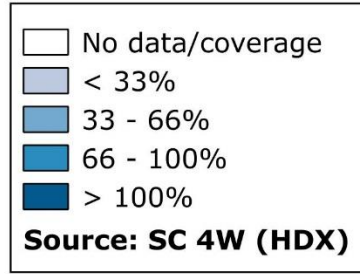


0 30 60 90 120 150 km



5 N

Tarps and Tents Coverage



Reporting

- Plans + Progress
- Ongoing activities/plans without update - **Will be deleted.**
- Trainings
- Winterisation



Shelter Logistics Update

Locations	Mt	M3
Kathmandu	338	1572
Deurali	183	913
Dhading	54	189
Bidur	153	69
Banepa	262	280
Chautara	331	639
Charikot	120	220
Syafru	17	66
Total	1458	3948

About 50 MT are currently in the UNHAS backlog



Post Distribution Monitoring and Agency Assessments

- Some information may be used to inform Shelter Cluster Monitoring Assessment as a Secondary Data Source
- Only 7 organisations have communicated PDM information.
- PDM occurred at different times, and differences in depth and breadth of monitoring. So SC following up to understand detail.



PDM Learning

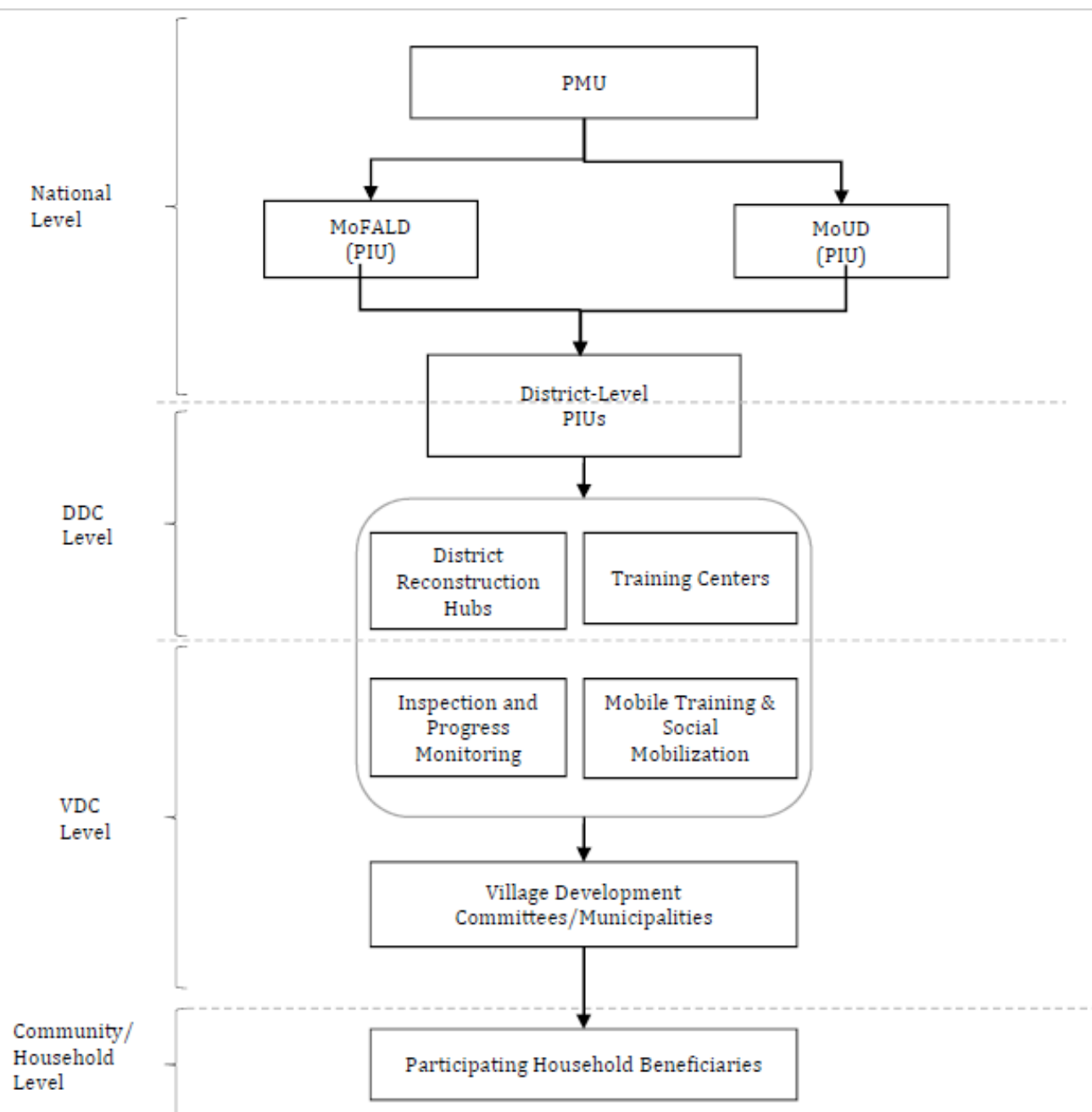
Learning points from PDM highlighted by agencies:

1. As expected shelter needs being highlighted as highest priority.
2. Some households highlighted that they didn't and would have liked to receive training or technical information on how to use shelter materials distributed.
3. Some households highlighted that they lacked information on when, where and what was being distributed.



HOUSING RECONSTRUCTION: INSTITUTIONAL STRUCTURE





National Reconstruction Authority (CEO)

Project Management Unit (Program Director)

Donor Coordination

Thematic Working Groups

MOFALD (Secretary)

MOUD (Secretary)

DOLIDAR PIU (Project Coordinator)

DUDBC PIU (Project Coordinator)

District Level TA: Lead Partner Organization

VDC Cluster Level TA: Partner Organizations

Mobile Technical Support Teams

DTO

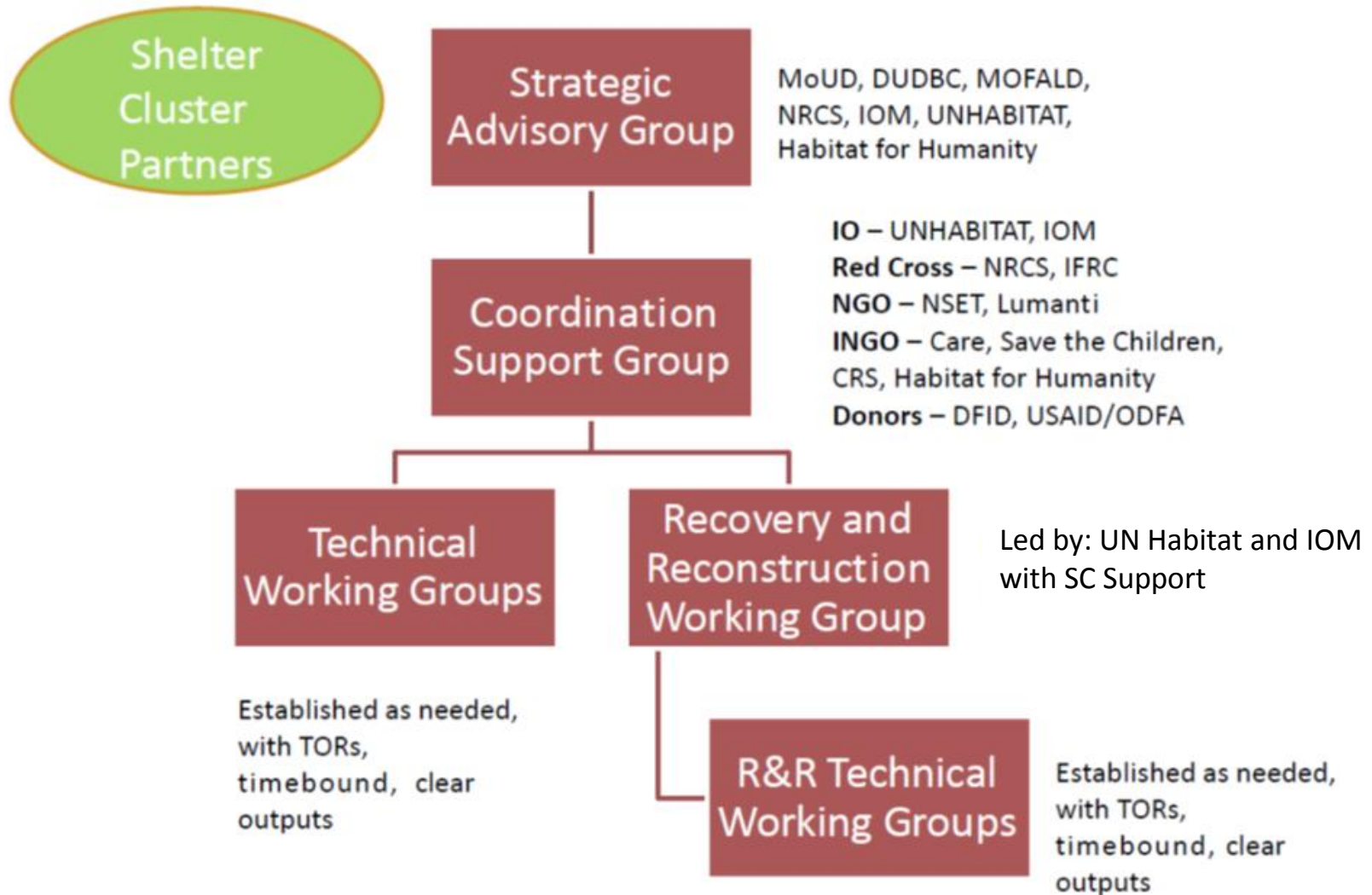
DDC / DL-PIU (LDO)

Division Office

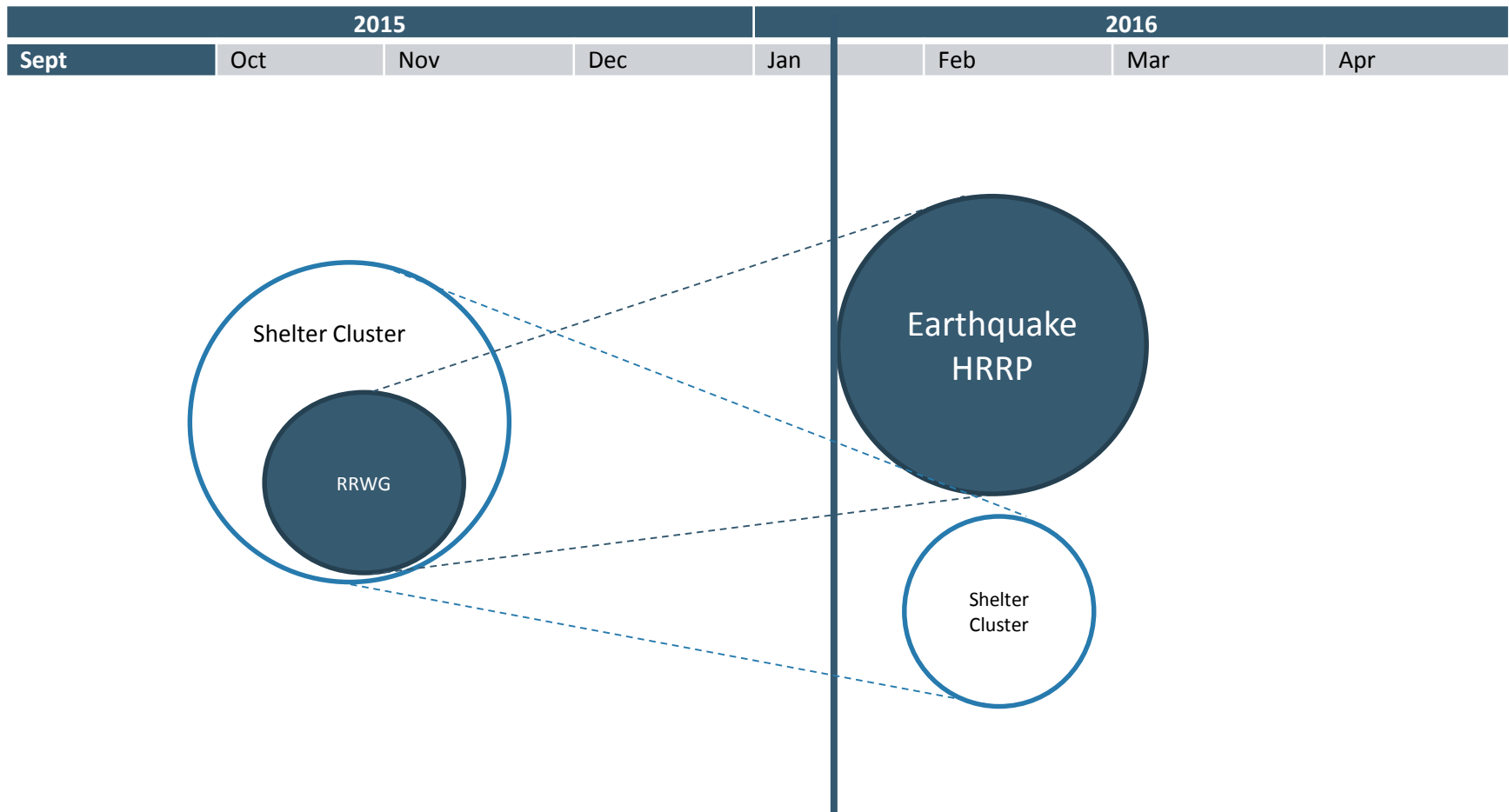
VDC

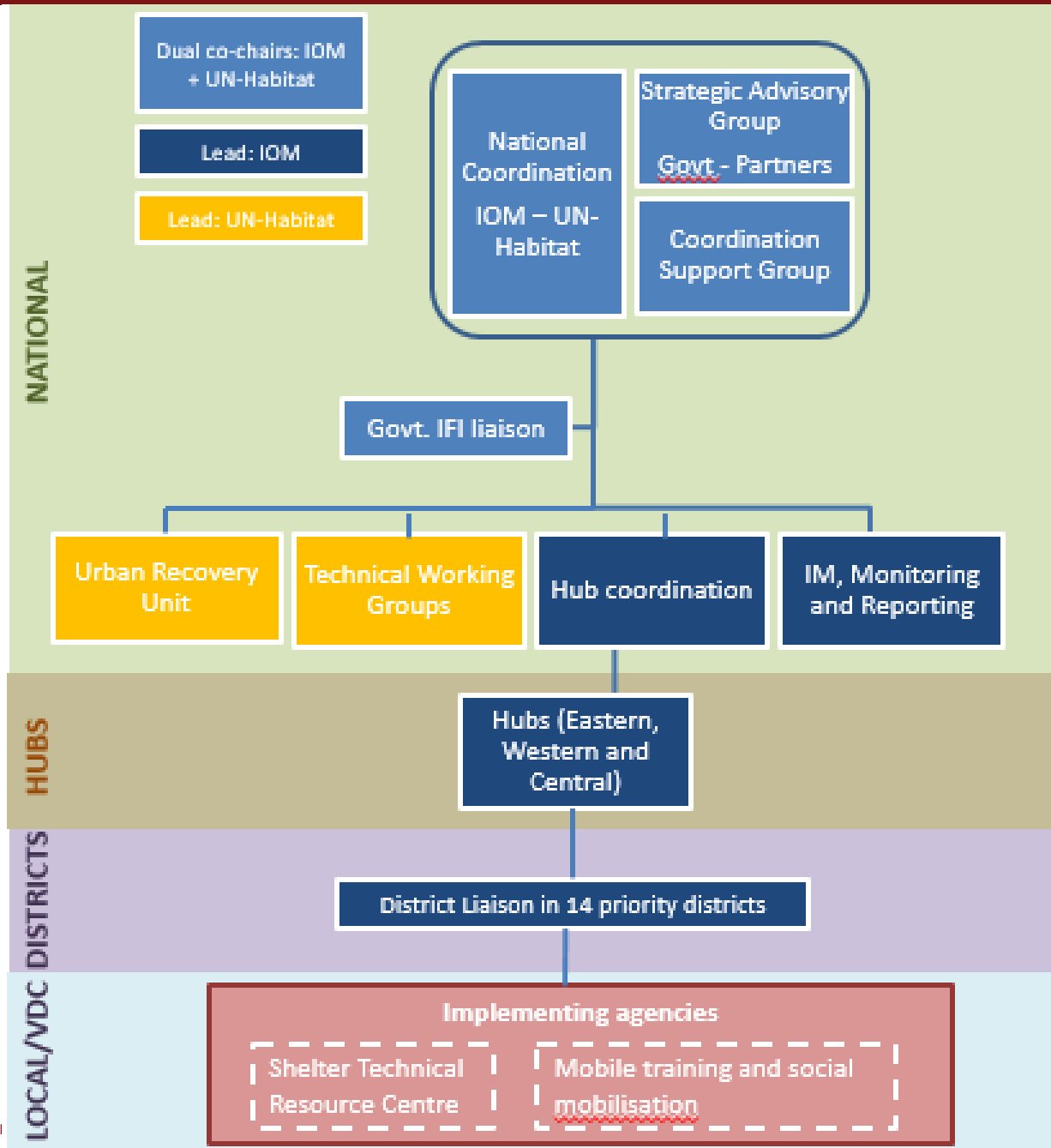
Household

Coordination Architecture



Transition: Shelter Cluster to Earthquake HRRP





Housing Reconstruction Programme Update

- Scheduled for Friday, November 6th, 3-5pm, location TBD
- GoN and IFIs will provide update on the housing reconstruction programme
- Questions and answers session included
- Invitation will be sent to all members of the RRWG



CBS UPDATE ON ASSESSMENT



NSET DETAILED DAMAGE ASSESSMENT – MUNICIPALITIES

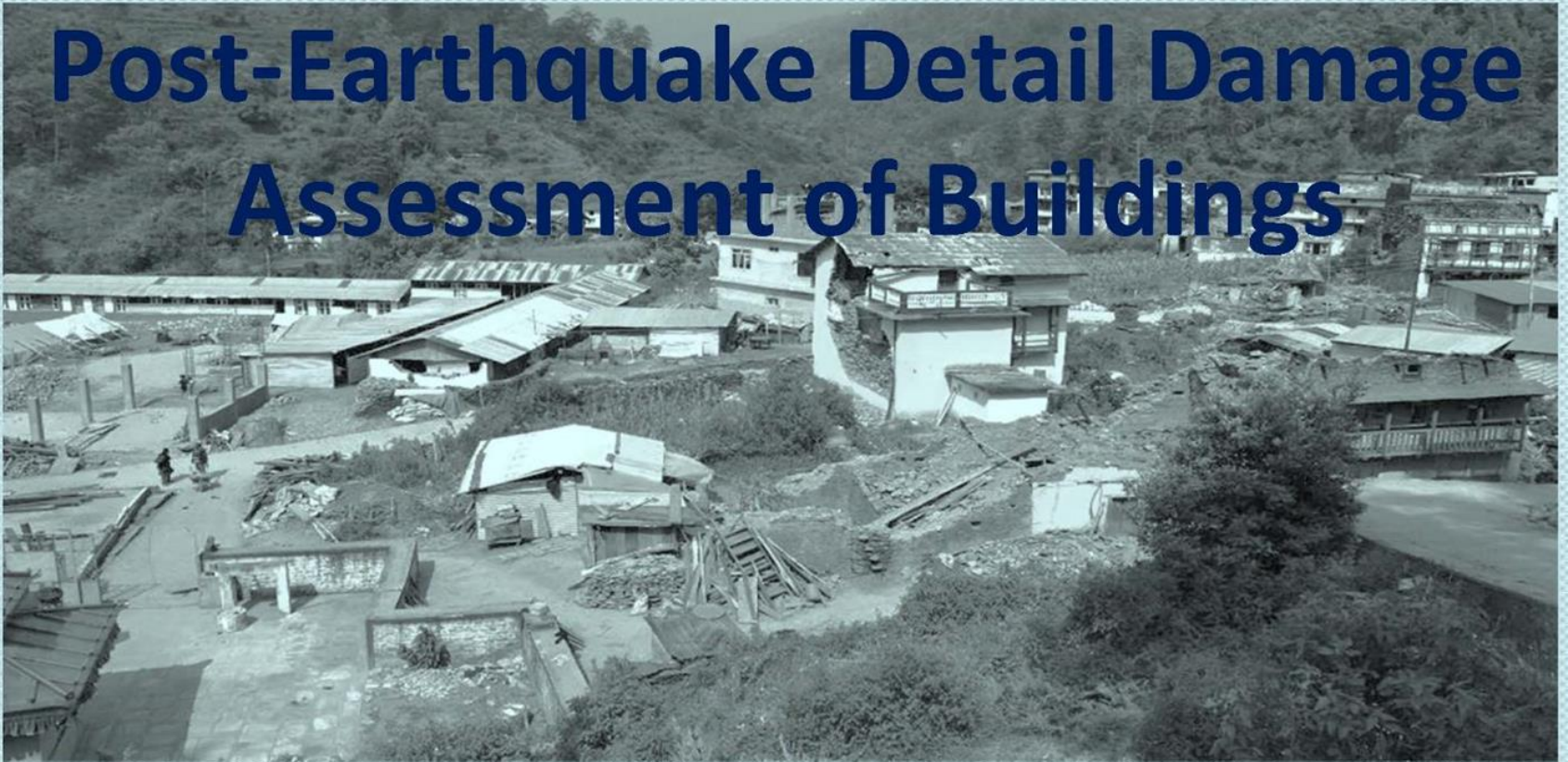




USAID
FROM THE AMERICAN PEOPLE



Post-Earthquake Detail Damage Assessment of Buildings



Funded by: USAID/OFDA

Implementing by: National Society for Earthquake Technology - Nepal



Objective

- **To assess damages of buildings**
- **To collect the structural characteristics of buildings**
- **To integrate building information in a GIS interface**

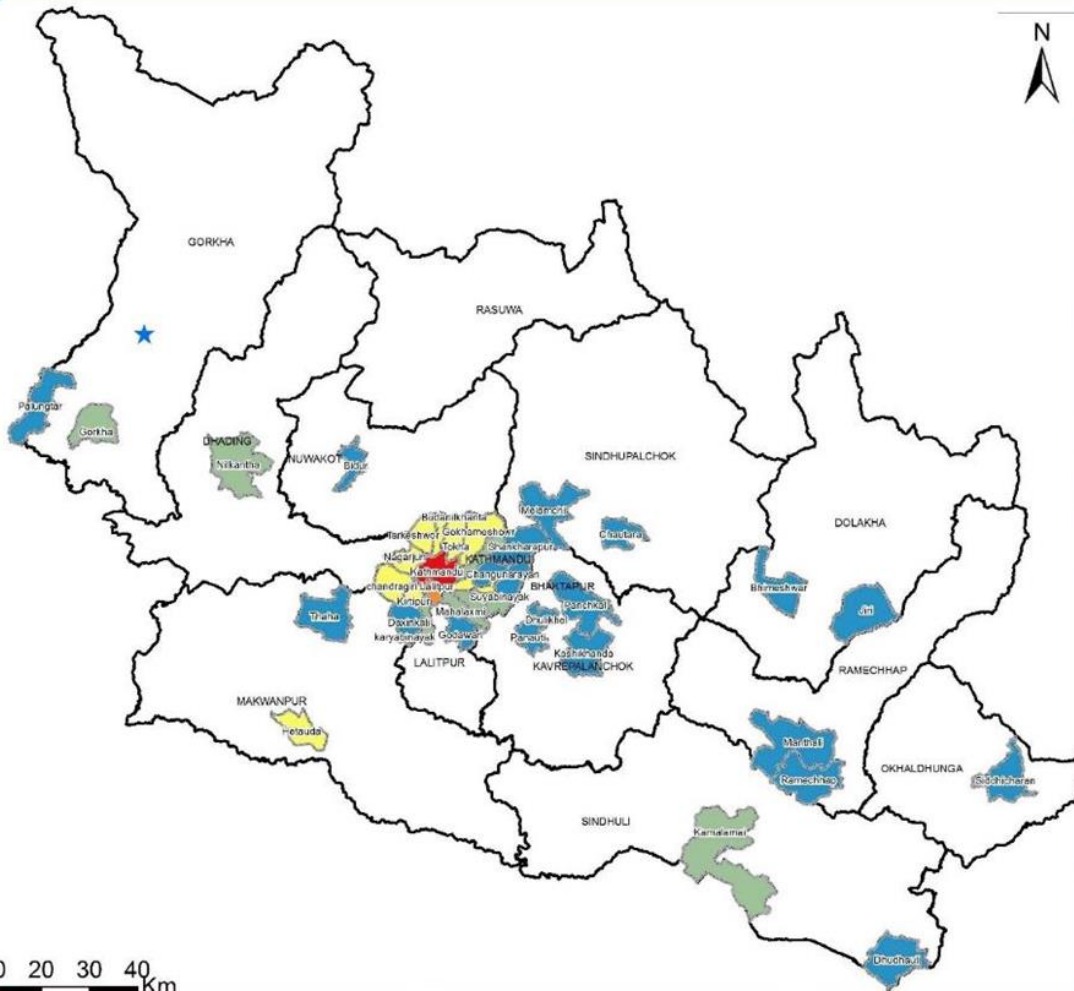


Use of Assessment Data/Results

- **Management of post-emergency** (e.g: No. of shelters and temporary houses for homeless people)
- **Repair and reconstruction** (e.g. strategy and overall funds needed)
- **Scientific advancements** (data collected contribute to the improvement of the vulnerability assessment methods: e.g. fragility curves, damage probability distributions)
- **Mapping Seismic Vulnerability of City** (assess the vulnerability of the building stock, taking into account the structural characteristics of buildings)



Target Area, Building and Time



- 16 Municipalities of Severe Affected District
- 200,000 Buildings
- Jun-Dec 2015

0 5 10 20 30 40 Km



Tools

- **Assessment form and technical manual** (DUDBC_ post disaster damage assessment guidelines_ 2011)
- **Procedures: set up by NSET** (for recruitment, training & mobilization of team, validation of compiled forms)
- **Data Management** (data collection, report, visualization of building spatial distribution)



Assessment form: Building Identification

- Building ID
- House Owner/Org. Name
- Contact No.
- District
- Municipality/VDC
- Tole
- Ward No
- G.P.S



Assessment form: Building Description

- Footprint area
- Age
- No. of Storey
- Shape of Bldg. Foot Print
- Position of Building Block
- Occupancy



Assessment form: Structural Type

- Building Typology
 - Type of Floor
 - Type of Roof
 - Vertical Structural Irregularity
 - Occupancy
1. Adobe
 2. Stone in mud
 3. Stone in cement
 4. Dry Stone
 5. Timber frame
 6. Bamboo
 7. RC Frame
 8. Brick/Block in mud
 9. Brick/Block in cement
 10. Mix
 11. Others



Assessment form: Damage Description

	Damage Levels									
	Extreme			Moderate-Heavy			Insignificant-Light			None
	>2/3	1/3-2/3	<1/3	>2/3	1/3-2/3	<1/3	>2/3	1/3-2/3	<1/3	
Overall Hazards										
➤ Collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							<input type="checkbox"/>
➤ Building or storey leaning	<input type="text"/>			<input type="text"/>			<input type="text"/>			<input type="checkbox"/>
➤ Other _____	<input type="text"/>			<input type="text"/>			<input type="text"/>			<input type="checkbox"/>
Structural Hazards										
➤ Foundation	<input type="text"/>			<input type="text"/>			<input type="text"/>			<input type="checkbox"/>
➤ Roofs/floors	<input type="text"/>			<input type="text"/>			<input type="text"/>			<input type="checkbox"/>
For Masonry Buildings										
➤ Corner separation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➤ Diagonal cracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➤ Out of plane failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➤ Delamination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➤ Gabel Wall	<input type="text"/>			<input type="text"/>			<input type="text"/>			<input type="checkbox"/>
For Frame Buildings										
➤ Joint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➤ Columns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➤ Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➤ Infill/Partition/Interior Walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonstructural Hazards										
➤ Parapets	<input type="text"/>			<input type="text"/>			<input type="text"/>			<input type="checkbox"/>
➤ Cladding, glazing	<input type="text"/>			<input type="text"/>			<input type="text"/>			<input type="checkbox"/>



Assessment form: Damage Description

Geotechnical hazards None Settlement Slope movement Liquefaction
 Ground fissures Rockfalls Others.....

Estimated Building Damage: Estimate building damage (repair cost ÷ replacement cost)

None 0-1% 1-10% 10-30% 30-60% 60-100% 100%

Damage Grade

Grade 1 Grade 2 Grade 3 Grade 4 Grade 5

Recommendations

Repair Retrofit Demolish None Further Evaluation

Areas inspected: Exterior Ground Story 1st Story Other Stories



Assessment form: Exposure & Socio-Economic

Number of family members ? _____

Who is the head of household ? Male Female

Does anyone in your household have a disability ? Yes No

What is the highest level of education by any members in your household ?

- No School Some Secondary School University/College Graduate
 Some Primary School SLC Don't Know
 Completed Primary School Some University/College

What is the main source of your income ?

- Agriculture Services/Government Livestock
 Remittance Businesses Owner Other

What is the current condition of living ?

- Living on own house Temporary Shelter Living in the house of relatives/friends
 Tent Rebuilding new house Other

Was anyone from your household injured by the earthquake ?

- Yes No

Was anyone from your household killed by the earthquake ?

- Yes No



Procedure

➤ Municipality

- Leadership & guidance
- MOU

➤ Surveyor

- Recruitment: Fresh Civil Engineer
- Training: Three days DDA training
- Mobilization

➤ Municipality Social Leader/Local Media

➤ Validation



Data Management

- **Android App for data collection**
- **Synchronization with Local Server**
- **Synchronization with administration server**
- **MS Access Interface**
 - Report
 - Stats & Chart
 - SQL queries, data filtering & analysis
 - Printing & Sharing
- **GIS Map**



Data filtering & Report

View data by

Select District:

Dolakha

Select Municipality:

JIR

[View Brief Report](#)

Export Brief Report: 

S.No.	Building ID	House Owner Name	Cont
263.	JF1235093	Chamarey Sherpa	
266.	JF1167097	Lakipa Sherpa	
268.	JF1167099	Migma Sherpa	9808
276.	JF1237105	Rita & kabita Ghimire	
280.	JF1166094	Doma Sherpa	

y - V4

		View Detail Report
Recommendation	<input type="checkbox"/> Select All	
Demolish	<input type="checkbox"/>	
Demolish	<input type="checkbox"/>	
Demolish	<input type="checkbox"/>	
Demolish	<input type="checkbox"/>	
Demolish	<input type="checkbox"/>	



Data filtering & Report

Building Damage Assessment - V4 Export Detail Report: x

Report of Detail Damage Assessment of Residential Buildings
(Gorkha Earthquake 2015)

Inspection

Inspector ID:	JF	Organization:	NSET
Inspection Time:	11:40:0	Inspection Date:	2015/6/2

Building Description

Building ID:	JF1235093	Building Name:	Chamarey Sherpa
District:	Dolakha	Municipality/VDC:	JIR
Tola:	Kuthamau	Ward No.:	3

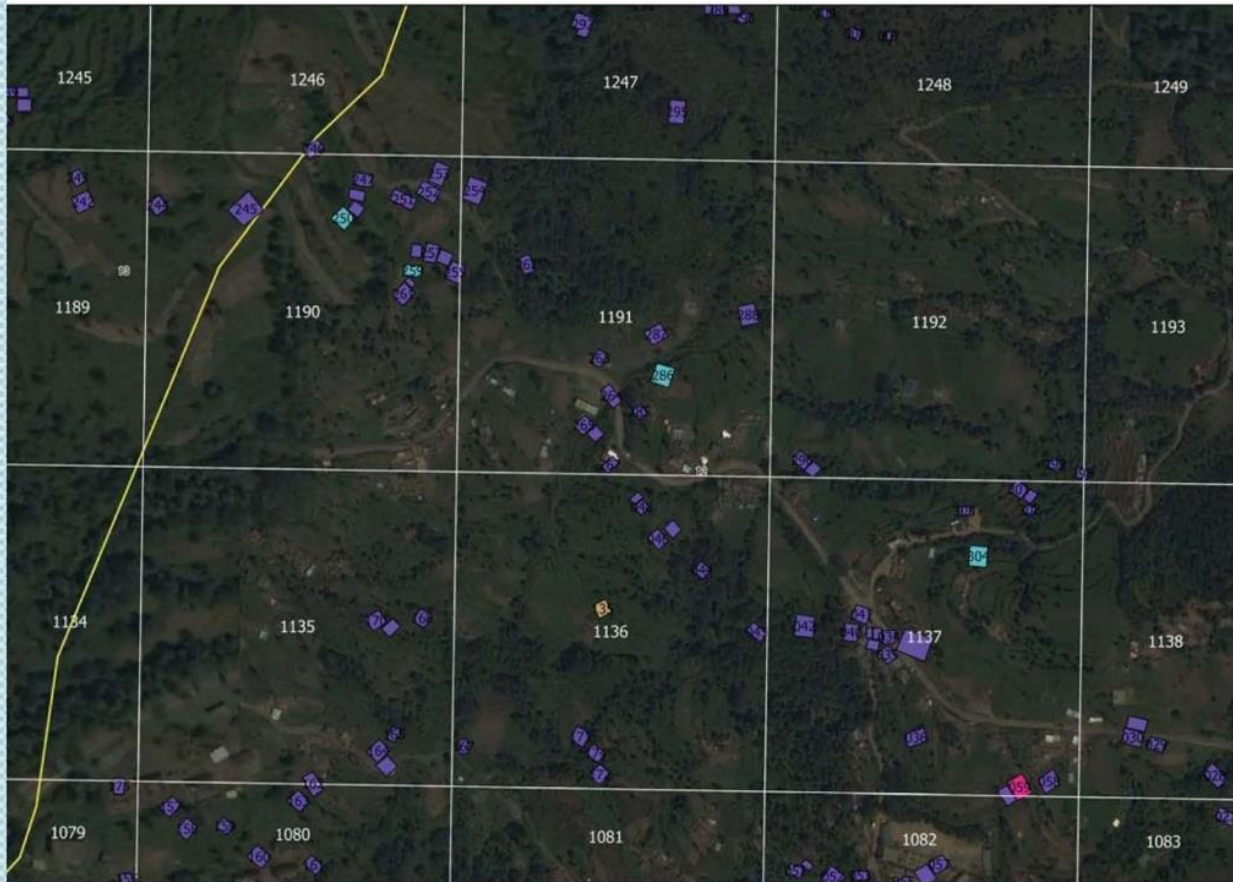
[OK](#)

[View Detail Report](#)

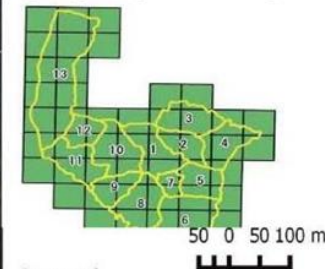
dition Select All

GIS Map

Detail Damage Assessment of Residential Buildings



GridNO	Buildid_1	NAME	Constructi	DamageGra
1136	049	Panshu ram bhujel	StoneInMud	Grade4
1136	048	Ganesh bdr bhujel	StoneInMud	Grade4
1136	046	Ram bdr bhujel	StoneInMud	Grade4
1136	045	Durga dahal	StoneInMud	Grade3
1136	044	Sushil subedi	StoneInMud	Grade5
1137	042	Bhim bdr budathoki	StoneInMud	Grade4
1137	041	Him bdr thakuri	StoneInMud	Grade4
1137	040	Dilkrishna thakuri	StoneInMud	Grade4
1137	035	Gambhir raut	StoneInMud	Grade4
1137	033	Yagya bdr raut	StoneInMud	Grade4
1137	039	Amit raut	StoneInMud	Grade4
1137	034	Indra raut	StoneInMud	Grade4
1137	038	Krishna bdr raut	StoneInMud	Grade4
1137	037	Ramsaran raut	StoneInMud	Grade4
1137	036	Parbati shah	StoneInMud	Grade5
1138	030	Hom bdr shahi	StoneInMud	Grade4
1138	031	Om kumari karki	StoneInMud	Grade4
1138	029	Tirtha bdr shahi	StoneInMud	Grade4



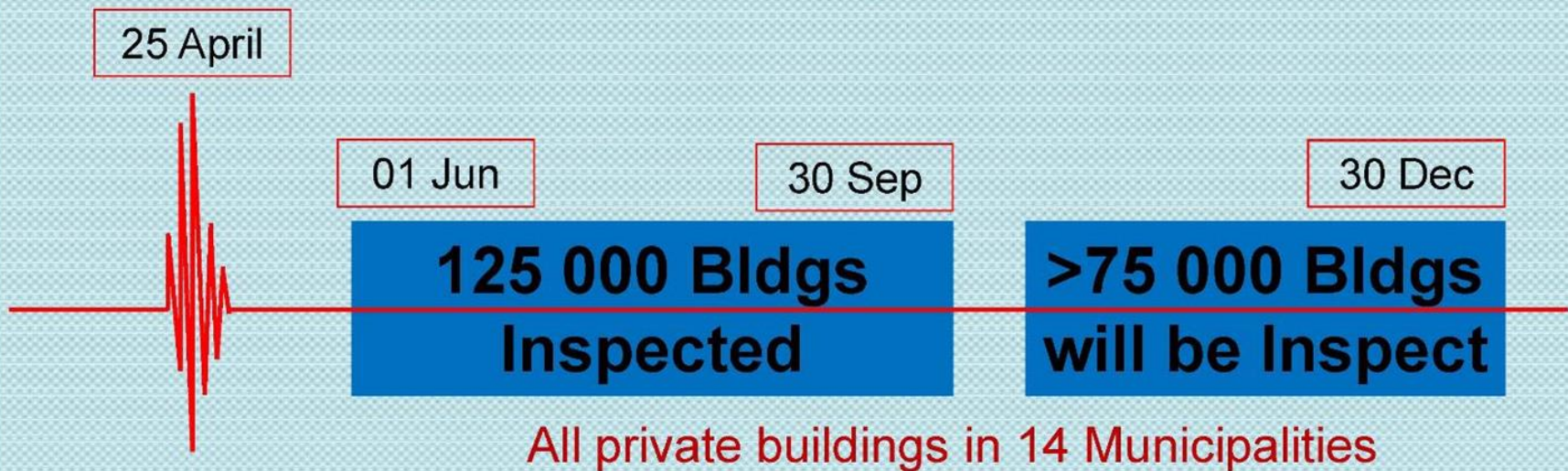
Legend

- Settlement
- Ward Boundary
- ▲ Building Typology
 - Stone in Mud
 - Stone in Cement
 - Brick in Cement
 - RC Frame
 - Others





Assessment Report upto Sep 30, 2015



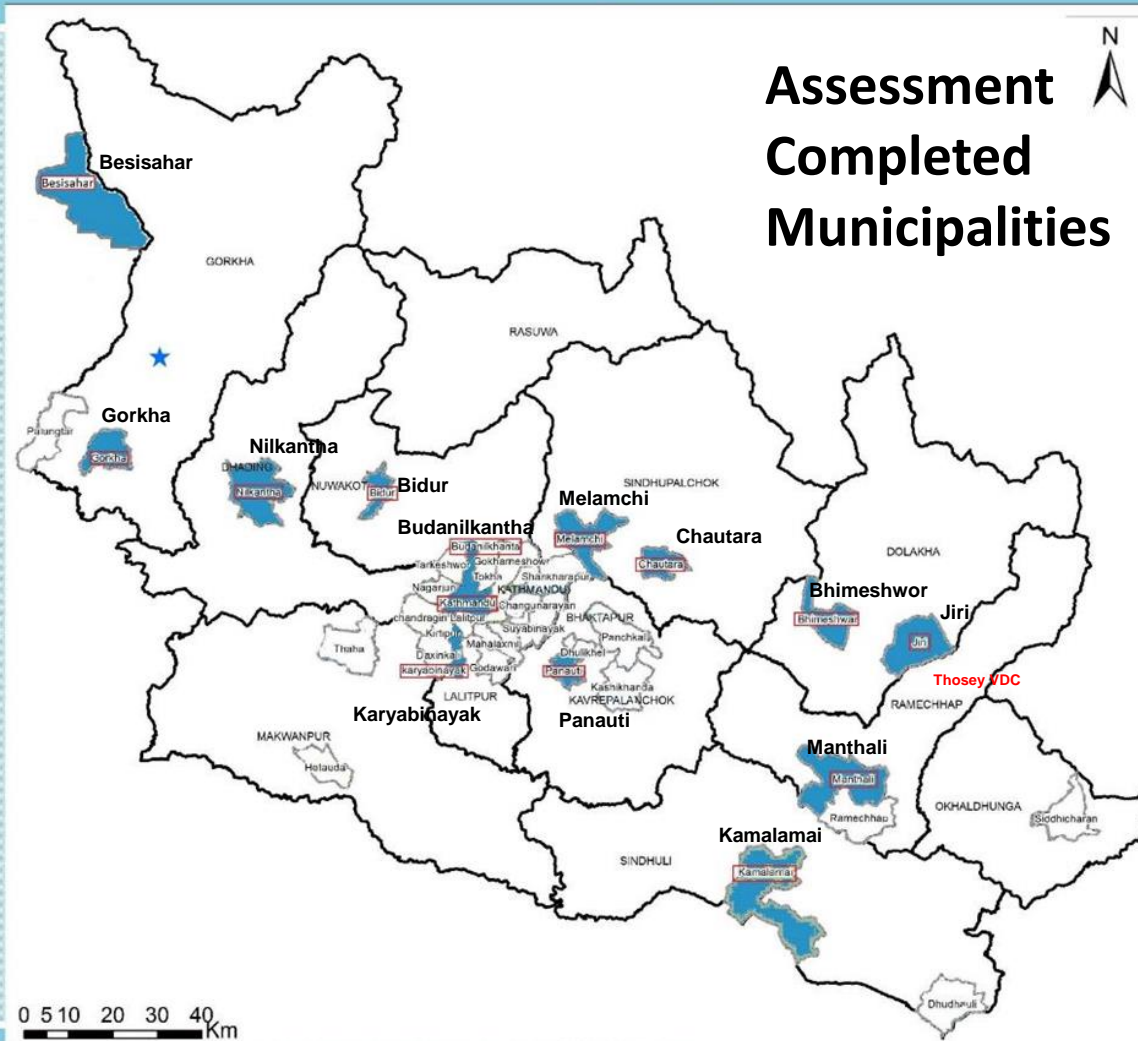
450 volunteer trained

400 inspectors mobilized (>16,000 man-days)

20 experts for preparatory activities and processing



Assessment Report upto Sep 30, 2015





Analyzed Data

Out of Kathmandu Valley

Besisahar: 5597

Bhimeshor: 6035

Chautar: 4308

Jiri: 3997

Kamalamai: 8575

Panauti: 6928

Thosey: 754

Manthali: 8295

Bidur: 6760

Inside of Kathmandu Valley

Lalitpur: 6630

Kathmandu: 8216

Budhanilkantha: 12723

Total Buildings: 78918



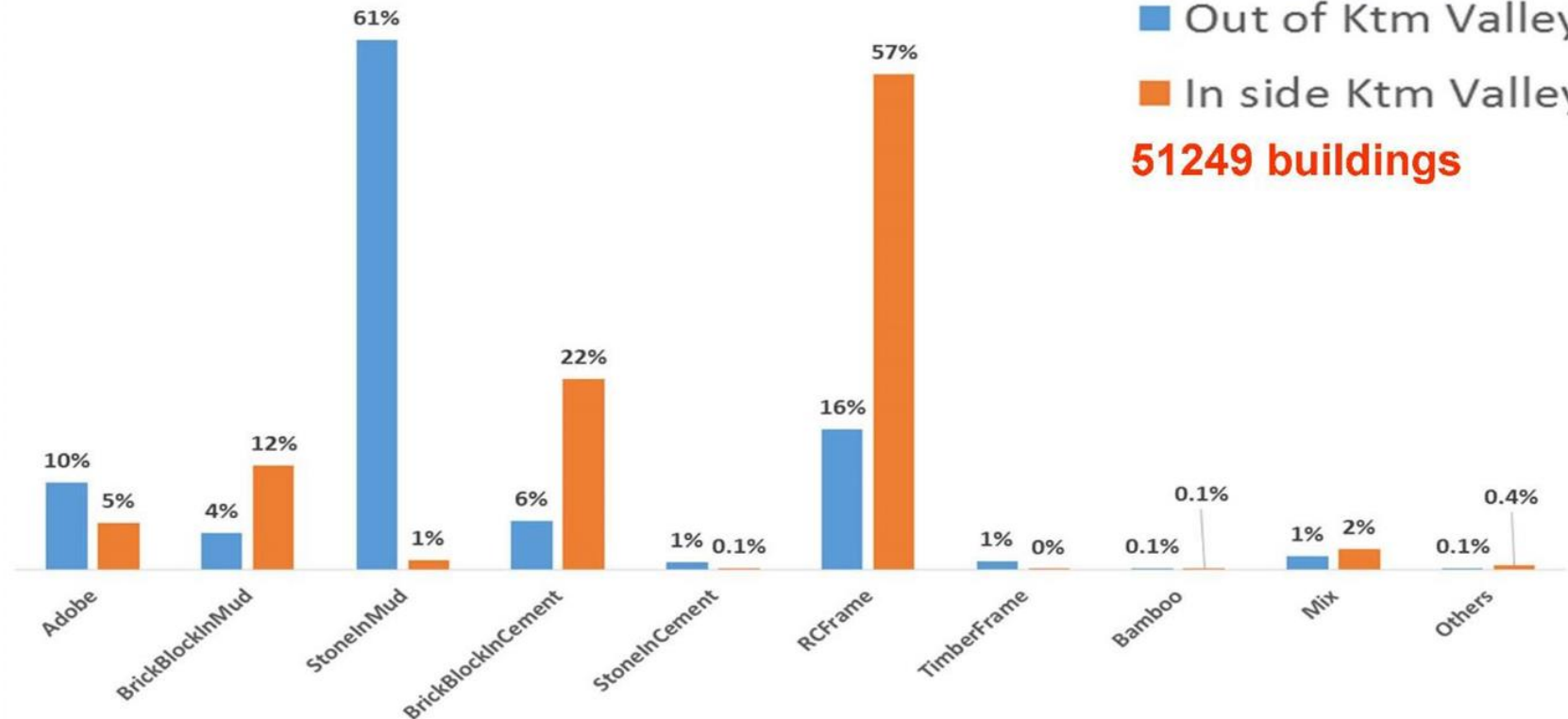
Building Typology

27569 buildings

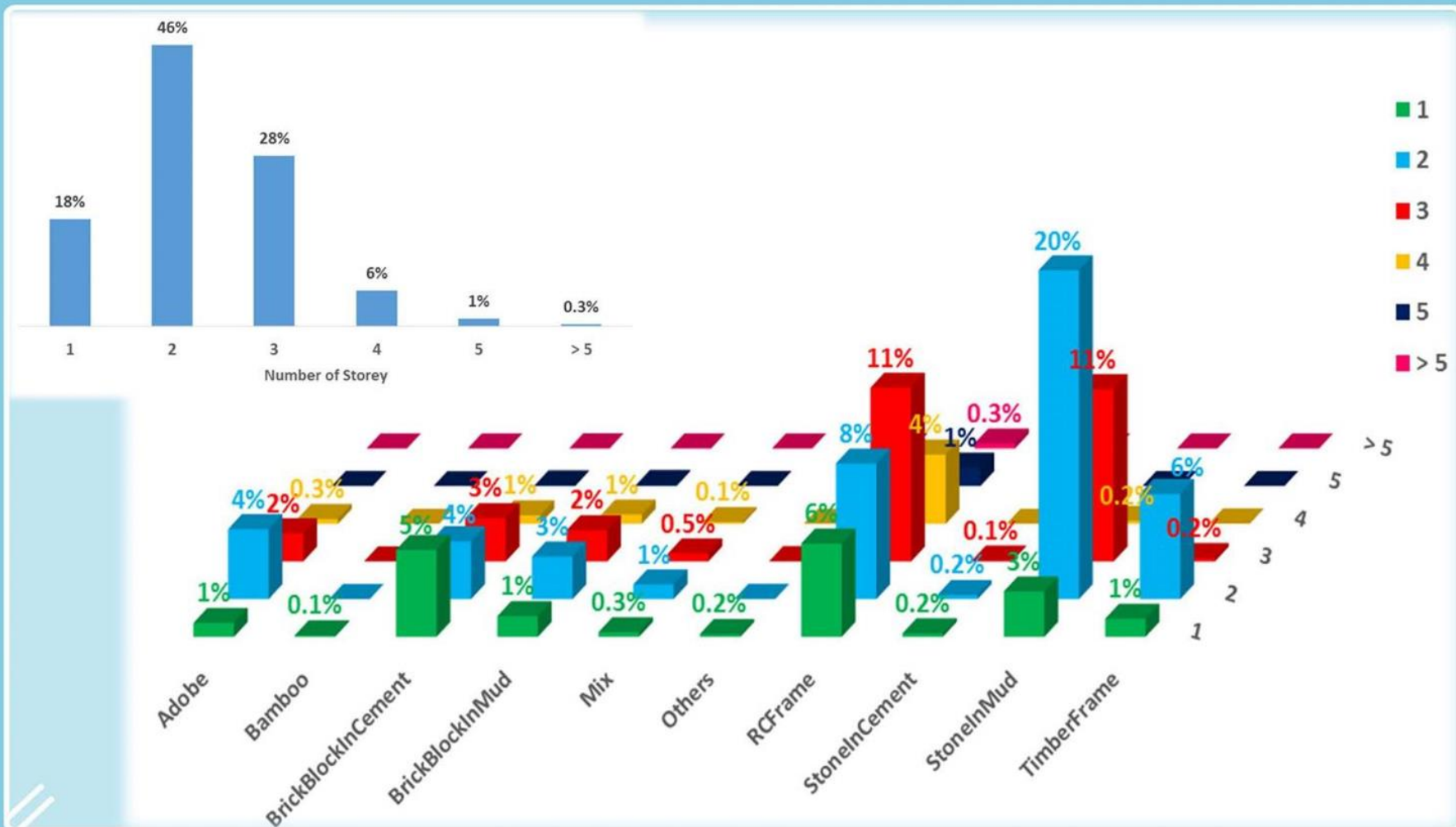
■ Out of Ktm Valley

■ In side Ktm Valley

51249 buildings

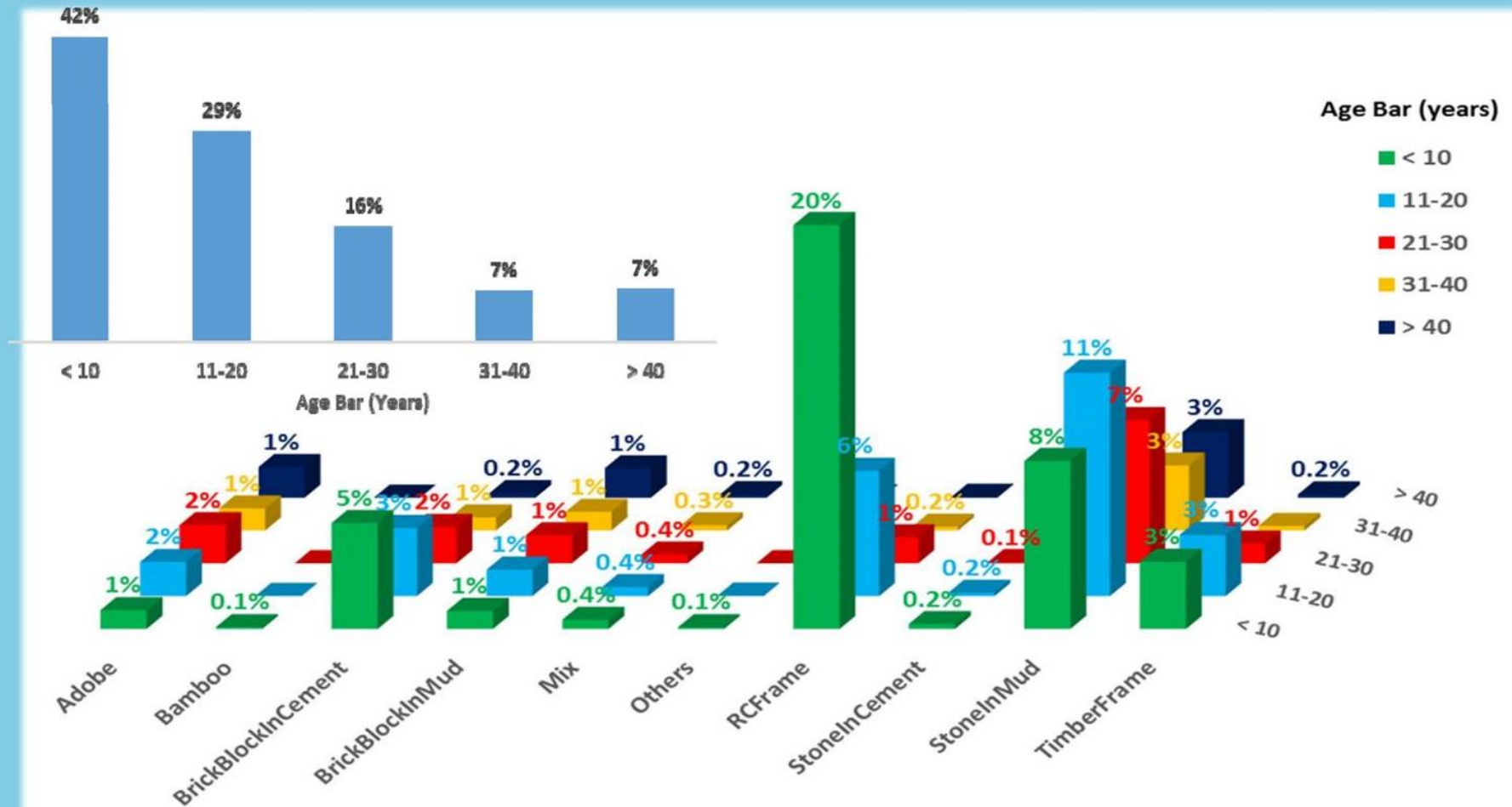


Profile of Number of Storey

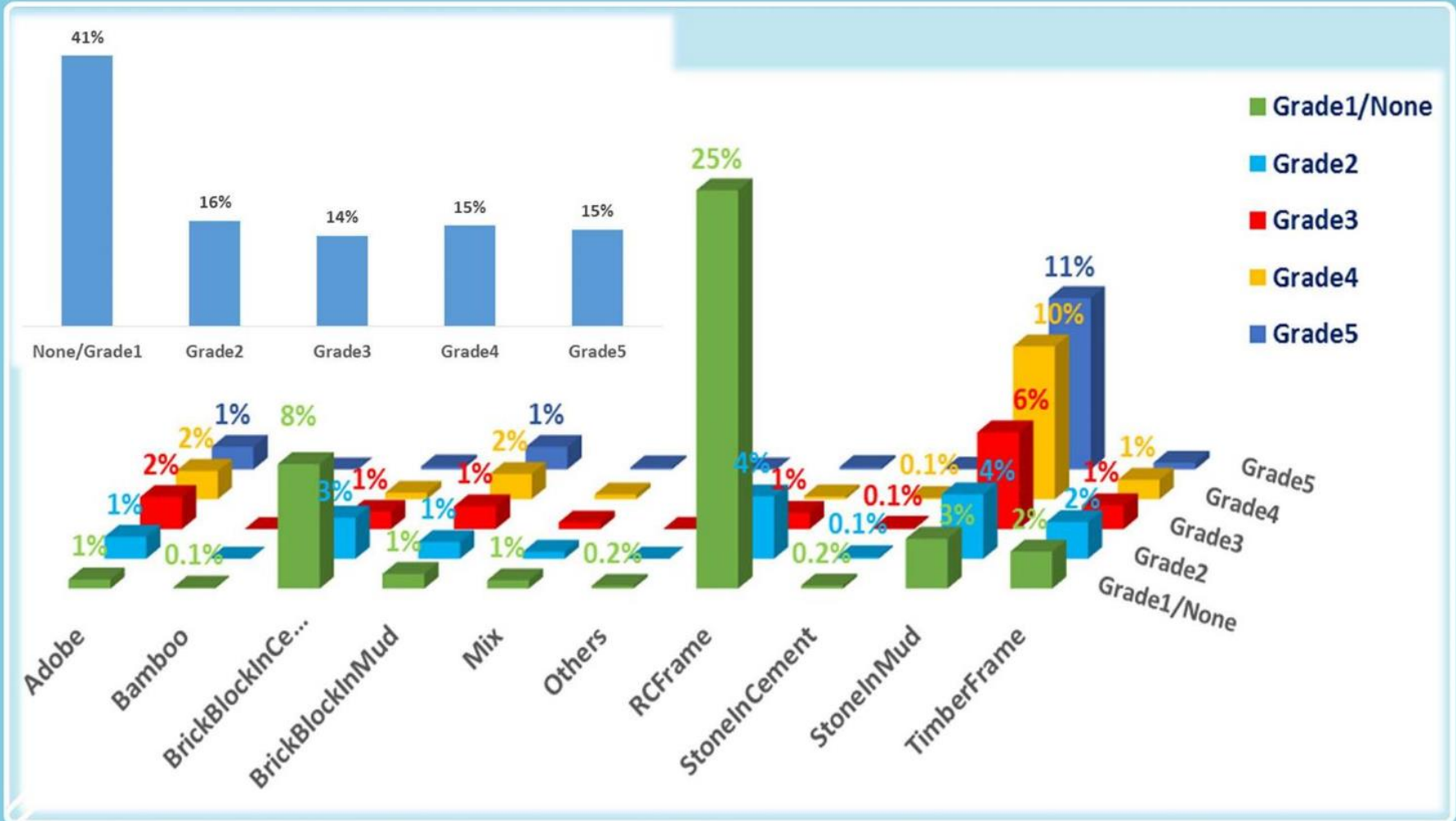




Profile of Age of Building



Damage Grade





CONCLUSION

- **A damage assessment method/procedure** has been set up by use of the updated technology.
- It is hoped that the procedure developed has offered a useful rapid information system and a decision-making system to the local authorities of a specific city and **could also be adapted for implementation in other earthquake prone areas.**

SHELTER CLUSTER MONITORING ASSESSMENT

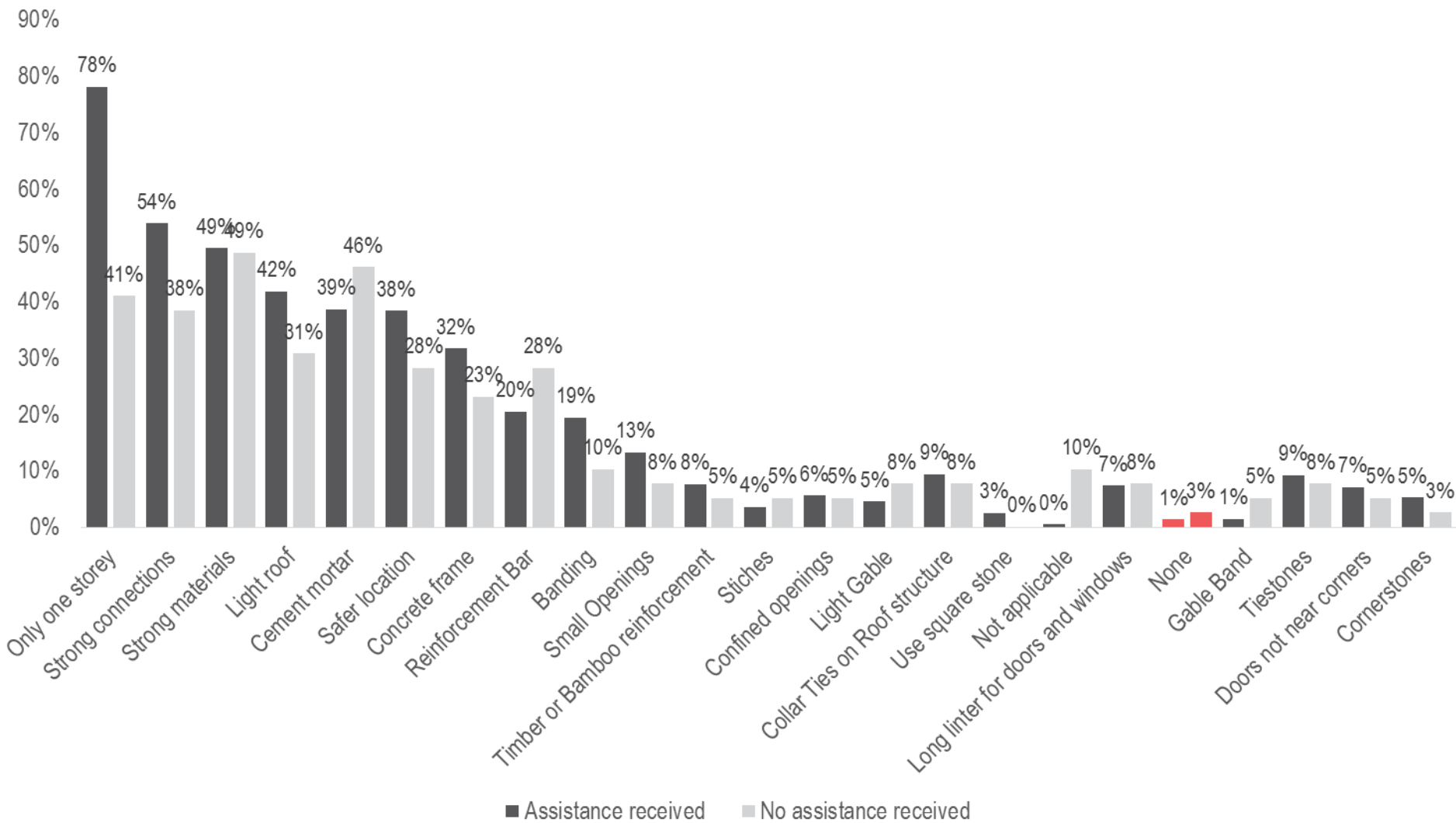


Overview

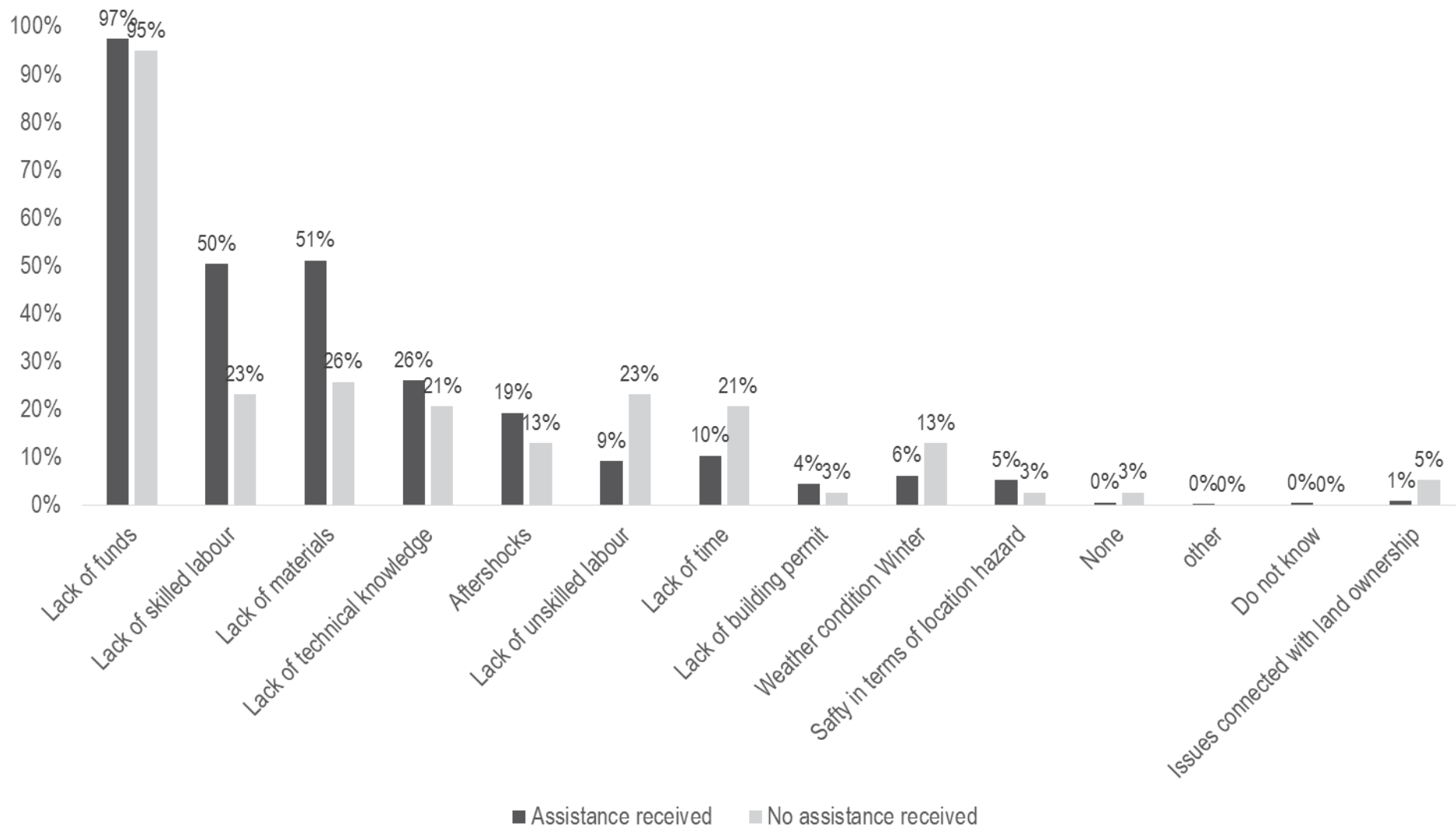
- 2nd round of assessment, 1st round report available on Shelter Cluster website
- Uses multi-stage cluster sampling in order to give a complete picture of the shelter situation of households
- Assessment TWG developed strategy and indicators for assessment, partners involved included CARE, Save the Children, Medair, World Vision, GOAL, NRCS, Tearfund, Plan, Habitat for Humanity, Lumanti, IOM, SDC, Oxfam, Polish Humanitarian Action, ASF-Nepal, and CRS
- Presented recovery and reconstruction linked findings prior to the RRWG meeting



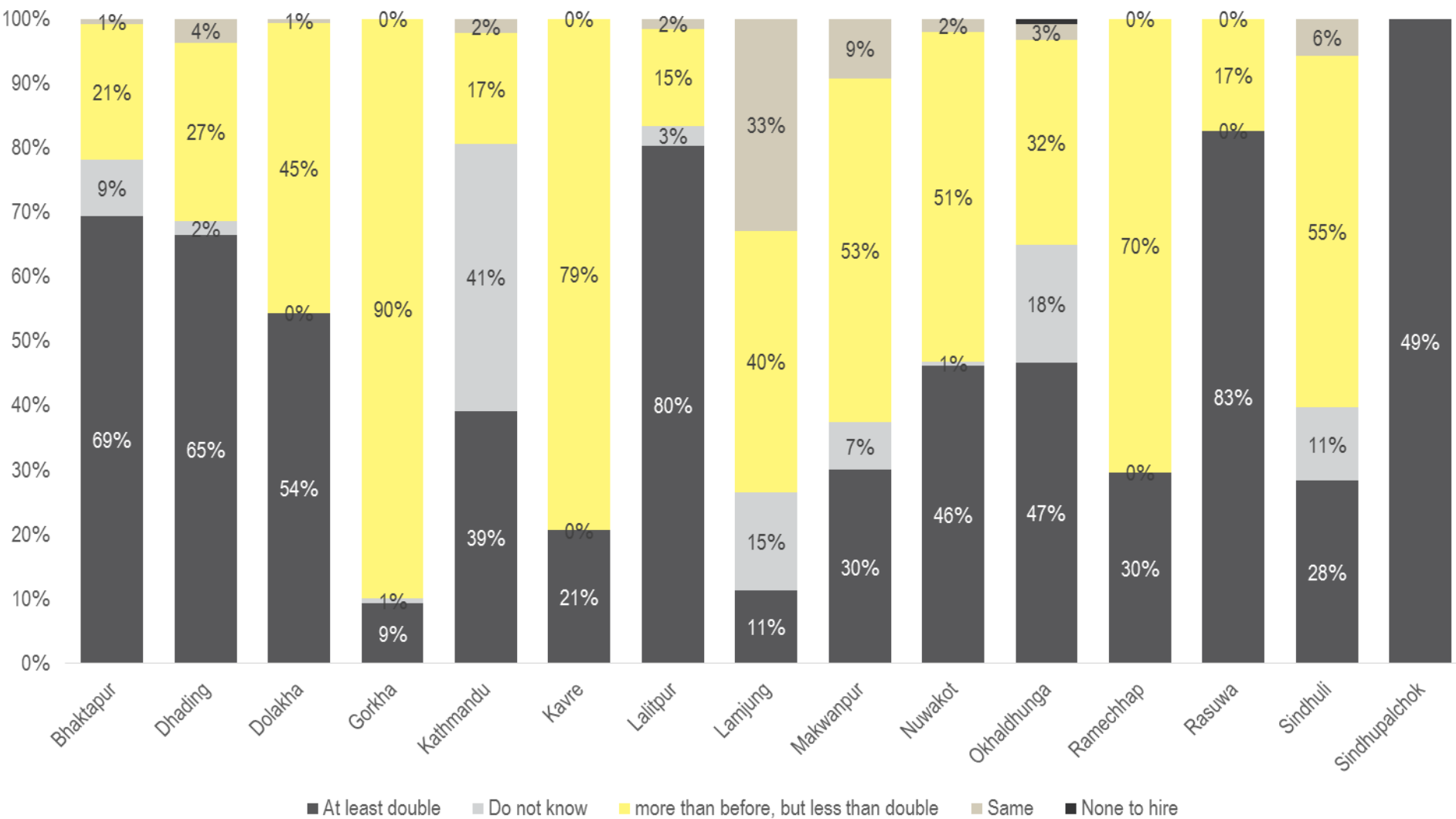
BBB BY ASSISTANCE



BARRIERS TO RECONSTRUCTION BY ASSISTANCE



COST AND AVAILABILITY OF MASONS, BY DISTRICT



Timeline

- Draft report shared 28th October
- Review process until 30th October
- 2nd draft delivered 4th November
- Final report due 10th November



Q&A DOCUMENT



Collection of Qs

- Prior to, and during POs workshop on 10th September
- Continued and on-going process
- Share questions via email to tech2.nepal@sheltercluster.org, during meetings
- District Focal Points, Hub Coordinators collecting questions at District / VDC level



Revised Q&A

- Will the GoN subsidy be provided as blanket coverage or will it be provided based on damage levels? (included in 2nd October issue but revised to include more information)
- How many houses does the GoN estimate require rebuilding?
- Where agencies have given 15,000 NPRs in lieu of the GoN (as occurred in Gorkha in the initial phases of cash for shelter distribution), will this be taken off the 200,000 NPRs subsidy?
- Can Partner Organisations (POs) provide 'top-up' support, either cash, materials, labours, to very vulnerable households on top of the 200,000 NPRs subsidy?



Revised Q&A Contd.

- In cases where permanent or semi-permanent toilets have been constructed by Partner Organisations (POs), will the value of these toilets be taken off the 200,000 NPRs subsidy?
- How can Partner Organisations (POs) address requests at district level for blanket coverage of shelter assistance?
- Will the GoN assist households to open bank accounts to access the loans, and are there specific credited banks where households will have to open their account in order to access the loans?



RRWG WORKPLAN



6 Month Workplan

- Focused on outputs
- Deliverables for RRWG and through transition to HRRP
- 8 key topics
 - Coordination, operational setup
 - Supply chain
 - Technical standards, guidance, and training
 - Social and Community
 - Communications and Outreach
 - Reporting, Monitoring and Evaluation
 - Housing, Land, and Property Rights
 - Urban



Resource People / Organisations

- Resource people / organisations supporting each output need to have relevant skills required to deliver that output
- Some are larger groups, some smaller, no prescribed number
- One resource person for each output takes 'lead' role, currently SC / IOM / UNH assigned 'lead' role, expected to change as outputs progress



Revision and Update

- Urge RRWG members to review and provide feedback on workplan – it is a living document
- Timelines will be updated based on what resource people / organisations determine to be feasible / realistic
- Will evolve over time as context evolves and outputs are completed, new outputs are required



RRWG WORKPLAN UPDATES



VDC Level Mapping

- Simple format developed
- VDC Level:
 - Reconstruction subsidy, amount
 - Mobile teams, number
- VDC Cluster Level:
 - VDC Cluster Level Technical Assistance Centre
 - Training
- District Level:
 - District Level Technical Assistance Centre
 - Training
 - IM, Reporting, M&E



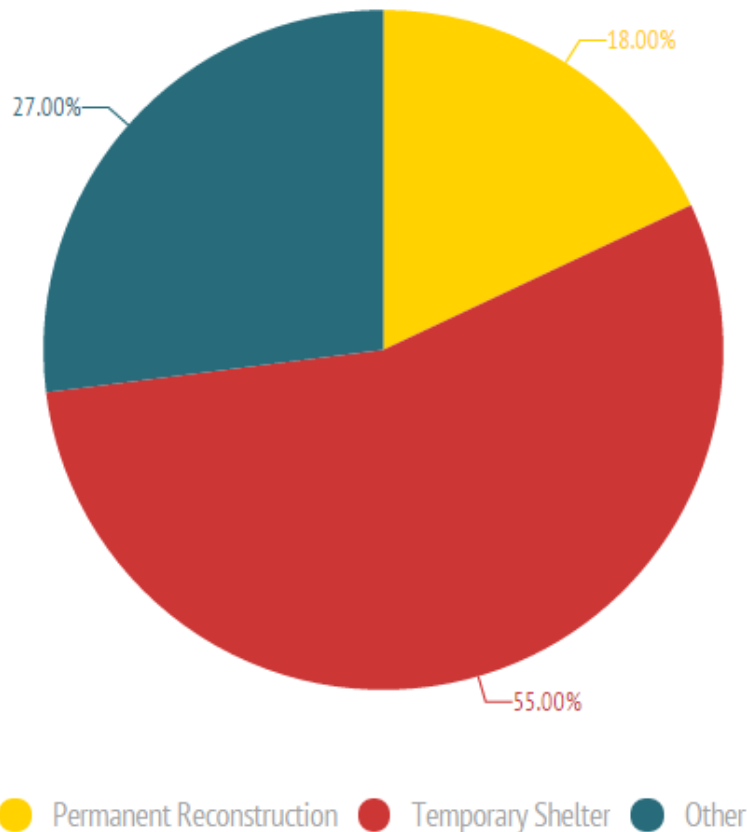
VDC Level Mapping Contd.

Activity Status	Funding Status
Started	Funded
Planned - Start Date Known	Application Submitted to Donor
Planned - Start Date Unknown	No Funding

- SC District Focal Points will complete format for each of 14 severely affected districts



IM for Training



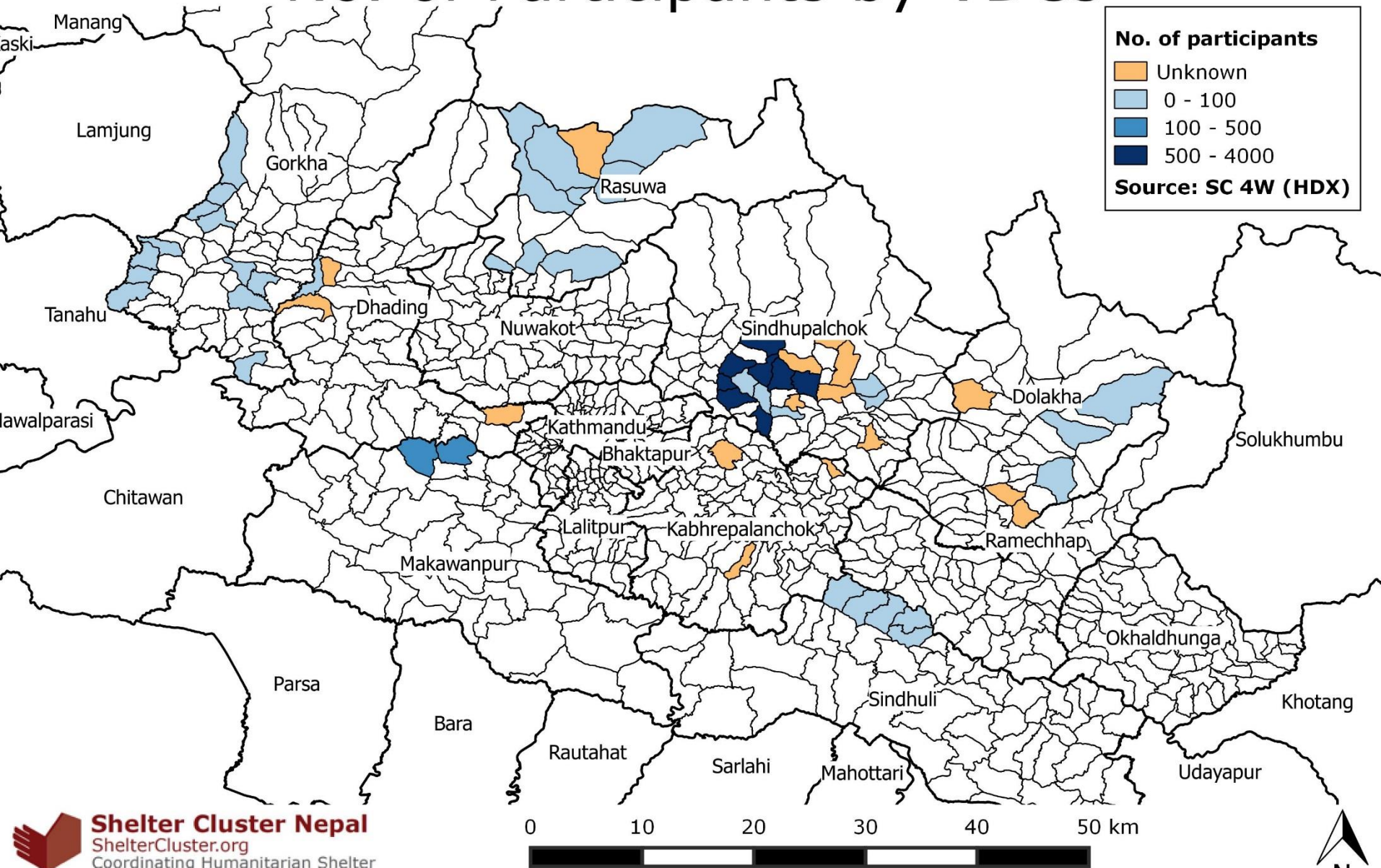
119 Trainings completed or planned

31 completed trainings

200,000 NPR average cost per training

3,000 NPR average amount paid to participants (wide range of amounts)

No. of Participants by VDCs



District Level Orientation to POs

- Due to start after festivals (mid-November)
- Builds on VDC level mapping
- Objective is to ensure that common understanding exists at district level and that district level input can be included and provide direction for RRWG
- Led by Shelter Cluster District Focal Points with support from SC technical coordinators and recovery advisor



DUDBC Housing TWG

- Design Catalogue for Reconstruction of Rural Housing, Version 1, currently with printers
- Includes:
 - Stone and mud mortar masonry
 - Brick and mud mortar masonry
 - Stone and cement mortar masonry
 - Brick and cement mortar masonry
- Includes ten key messages material produced by Shelter Cluster TWG
- Other typologies to be included in future versions of the catalogue
- Next step is producing manual for construction



Demonstration Houses

- Part of 'Common MoUs / ToRs' output
- Working with CARE and other partners to have common approach across all districts
- Optimise resources by having technical support at central level to support training of staff, development of designs, addressing issues as they arise during construction, etc.
- Key part of communications and outreach, provides households with opportunity to see improved building practices



Technical Training

- Support Earthquake resilient technical training - 50,000 masons in 2 year period
- DUDBC masons training materials, including for ToT, available on SC website (links shared via email on 25th September)
- DUDBC EQ Resistant Building Construction Training Procedure 2015 also available on SC website, along with unofficial English translation
- Need to adopt a collaborative approach, optimise resources available



ToT, Masons Training

- First day of first ToT today
- Delivered by NSET
- At least two more ToTs for POs staff will be conducted, further possible if there is demand
- ToT is delivered in Nepali – trained trainers need to be able to deliver the training to masons in Nepali
- Training briefing in English will be available if there is interest. If you are interested please notify Siobhan Kennedy,
tech2.nepal@sheltercluster.org



PASSA ToT

- ToT for POs staff, Tuesday 3rd – Saturday 7th November, inclusive
- Provided by IFRC Geneva
- 32 participants
 - 12 Red Cross
 - 20 POs
- Planning workshop immediately after ToT, contextualising PASSA for Nepal



AOB

- If you would like to be added to the RRWG mailing list please write to Siobhan Kennedy, tech2.nepal@sheltercluster.org
- Urban Safety of Mega Cities in Asia (USMCA) Symposium, 29th and 30th October
- Next SC meeting on the 4th November (no partners forum, 11th November is first day of Tihar)

