NEPAL HEALTH SECTOR SUPPORT PROGRAMME

Nepal Health Sector Transition and Recovery Programme

NHSSP PD 1: Detailed Plan for Health Infrastructure in Three Focal Districts and Structural Assessments in 14 districts

UKaid
from the British people

NHSSP

DETAILED PLAN FOR THE REPAIR, MAINTENANCE, AND REBUILDING OF HEALTH INFRASTRUCUTRE IN THREE FOCAL DISTRICTS AND DETAILED STRUCTURAL ASSESSMENTS COMPLETED FOR ALL 14 DISTRICTS

Payment Deliverable NHSSP 1

November 2015

Cover Photo: DFID

Contents

LIST OF ACRONYMS

CHU	Community Health Unit
DFID	Department for International Development
DHO	District Health Office
DoHS	Department of Health Services
HI	Handicap International
HP	Health Post
HSTRP	Health Sector Transition and Recovery Programme
MoU	Memorandum of Understanding
NHSSP	Nepal Health Sector Dupport Programme
OPM	Oxford Policy Management
PDNA	Post Disaster Needs Assessment
PHCC	Primary Health Care Centre
SIRC	Spinal Injury Rehabilitation Centre
T&R	Transition and Recovery
TA	Technical Assistance
TPO	Transcultural Psychosocial Organisation

Detailed Plan for the Repair, Maintenance and Rebuilding for Three Focal Districts and Detailed Structural Assessments Completed for All 14 Districts

1. BACKGROUND

The 7.8 magnitude earthquake that hit Nepal on the 25th April, and the multiple after-shocks that followed claimed more than 9,000 lives, injured more than 23,000, and destroyed over half a million homes. In its aftermath, the Government of Nepal declared fourteen districts as most severely affected.

The DFID funded Nepal Health Sector Support Programme (NHSSP) has been providing Technical Assistance (TA) to the Ministry of Health and Population (MoHP) and Department of Health Services (DoHS) since 2010 to help implement the second National Health Sector Programme (2010-15). As a part of its multi-sector earthquake response, DFID contracted Options Consultancy Services to provide additional TA to support a Nepal Health Sector Recovery and Transition Programme (HSTRP).

Under HSTRP, Options has partnered with Oxford Policy Management (OPM) and several non-governmental organisations (Handicap International Nepal (HI Nepal); the Spinal Injury Rehabilitation Centre (SIRC), and the Transcultural Psychosocial Organization (TPO)) to provide specialist rehabilitation and psychosocial support services. This 12 month programme runs until July 2016 with the aim of restoring essential health care services, including obstetric care, family planning, physical rehabilitation, and psychosocial support across the 14 worst affected districts with a particular focus on Ramechhap, Dolakha, and Sindupalchowk districts. In order for this to happen health facilities must be returned to operational status. NGO partners are also providing specialised services in an additional three districts - Nuwakot, Kavre, and Rasuwa.

2. SPECIFIC BACKGROUND

The earthquake and its many aftershocks caused extensive damage to 84% (375 out of 446) public health facilities in the 14 worst affected districts. Many were destroyed and hundreds of other health posts, primary health care centres (PHCCs) and hospitals were damaged to the point where they could no longer function. As a result, many essential health care services in earthquake affected districts became unavailable at a time when they were most needed.

3. RATIONALE

An initial assessment of the level of damage caused to facilities in all effected districts was conducted in the weeks immediately following the second major earthquake in May 2015. The results of this initial review - the Post Disaster Needs Assessment (PDNA) - were used to estimate and prioritise the level and focus of support required by government and donors. However, more detailed architectural and structural plans, technology recommendations, and more accurate costings are needed in order to guide the development of detailed repair and reconstruction plans.

4. PURPOSE AND OBJECTIVES OF THE WORK

The overall purpose of this assignment was to support the MoHP and district health offices (DHOs) in Sindhupalchowk, Ramechhap, and Dolakha to plan and coordinate the rehabilitation (including repair, maintenance, recovery, and reconstruction) of health facilities. The team has now completed planning for all 14 districts with details included in the Annexes.

Further objectives were to conduct detailed structural assessments of health facilities in all 14 earthquake affected districts. In this respect, some health institutions proved inaccessible due to landslides are not included here. However, these make up only about 2% of total facilities in the districts concerned. Included in this report are PDF files for all of districts and facilities; these will be available on the programme's website www.nhssp.org.np in the first week of December 2015.

5. FINDINGS

Following the PDNA exercise, detailed engineering assessments were carried out to obtain information on the infrastructure status of 665 health facilities (health posts, primary health care centres [PHCCs], and district hospitals) in the 14 districts (see Tables 1 and 2). These assessments contain information on the damage status of the buildings, infrastructural properties (e.g. access to electricity, to water, to a road, and to internet) and information on land ownership. As more data becomes available the assessments will be updated.

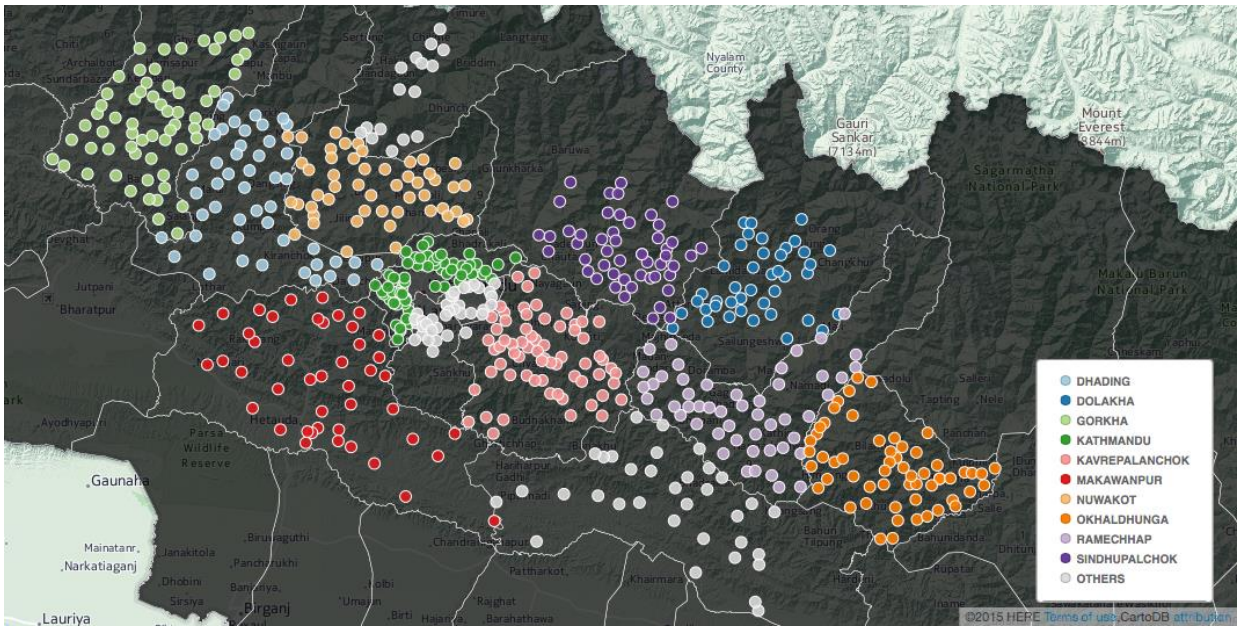

FIGURE 1: ASSESSED HEALTH FACILITIES IN THE 14 WORST AFFECTED DISTRICTS

Table 1: Different Types of Facilities Assessed:

Facility Type	Total
DHO	3
Health Post	617
Hospital	6
PHCC	39
Total	**665**

Table 2: Number of Health Facilities Assessed Per District

District	Total
Bhaktapur	19
Dhading	49
Dolakha	61
Gorkha	62
Kathmandu	66
Kavrepalanchok	67
Lalitpur	17

Makwanpur	45
Nuwakot	53
Okhaldhunga	58
Ramecchap	54
Rasuwa	16
Sindhuli	35
Sindhupalchowk	63
Total	**665**

6. DAMAGE STATUS

Compared to data from the earlier PDNA report, the detailed engineering assessments focused more on specific damage caused to individual building blocks within a facility rather than overall damage status. The table below shows the damage status of each of the assessed building blocks in the 14 districts. Here it should be noted that a building block does not necessarily represent a health facility since many contain more than one building.

Each building was classified in one of the following categories:

a) Completely Damaged
b) Partially Damaged - non repairable
c) Partially Damaged - repairable
d) Superficially Damaged
e) Undamaged

In the table below, categories (a) and (b) have been combined since they both result in an unusable building that needs to be rebuilt since it cannot be repaired:

Table 3: Damage Status of Building Blocks

District	Total Blocks	Completely Damaged	Partial Damage	Superficial Damage	No Damage
Sindhupalchowk	108	68	13	10	17
Gorkha	88	51	13	13	11
Dolakha	114	53	20	11	30
Ramechhap	134	60	20	12	42
Rasuwa	27	11	7	6	3
Okhaldhunga	77	30	19	18	10
Nuwakot	75	29	18	18	10
Bhaktapur	25	9	6	8	2
Dhading	96	31	18	30	17
Makwanpur	89	22	10	13	44
Kavrepalanchok	123	30	22	21	50
Sindhuli	80	19	6	14	41
Kathmandu	77	12	13	21	31
Lalitpur	28	4	6	13	5
Total	**1141**	**429**	**191**	**208**	**313**

An secondary analysis of data was conducted to classify facilities according to their different damage status as follows:

Table 4: Damage Status of Health Facilities in 14 Districts

Districts	Completely Damaged Facilities	Partially Damaged Facilities
Sindhupalchowk	43	8
Gorkha	39	7
Dolakha	32	11
Okhaldhunga	24	14
Kavrepalanchok	22	10
Ramechhap	21	11
Nuwakot	19	13
Dhading	18	10
Sindhuli	15	2
Makawanpur	9	7
Rasuwa	9	4
Kathmandu	8	12
Bhaktapur	5	6
Lalitpur	1	4
Total	**265**	**119**

The above figures do not necessarily reflect the precise number of damaged facilities, but should be viewed as indicative of the damage levels in the various districts. To ascertain the damage status of each of the facilities, the detailed engineering report of each facility must be studied (see Annex 1).

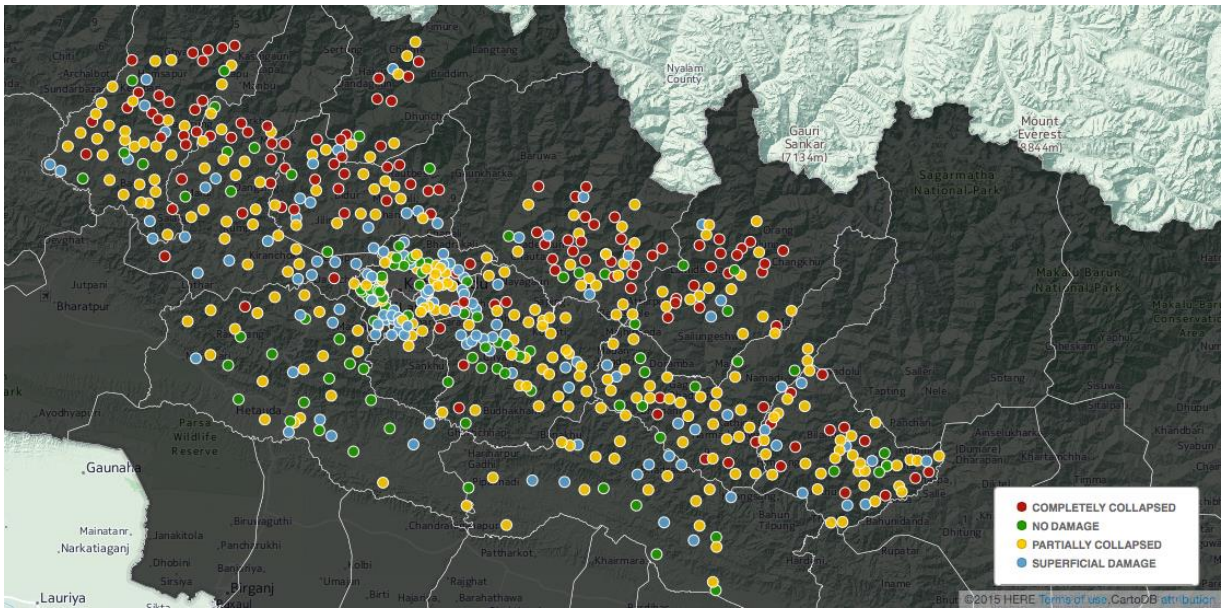

FIGURE 2: DAMAGE STATUS OF THE ASSESSED HEALTH FACILITIES

Using the analysed data from Table 4, we can see that 265 out of the 665 assessed facilities are completely damaged (43%), with Sindhupalchowk (43), Dolakha (39), and Gorkha (32) having the largest number of completely collapsed health facilities.

7. SUPPORT TO MOHP FOR RECONSTRUCTION/REPAIR

A number of organisations, both national and international, have offered support to MoHP for the reconstruction and repair of damaged health facilities. Starting in June 2015, the MoHP started signing Memoranda of Understanding (MoUs) with supporting partner organisations for the reconstruction and repair of health facilities, as well as other health services and logistical support. A total of 30 MoUs have been signed by MoHP to date, for various types of support. The table below shows the district-wise distribution of MoUs.

Table 5: Distribution of MoUs Signed According to Districts

District	Facilities Being Reconstructed/ Repaired
Sindhupalchowk	55
Gorkha	34
Dhading	33
Dolakha	25
Nuwakot	25
Rasuwa	13
Kavrepalanchok	5
Bhaktapur	4
Ramecchap	2
Kathmandu	2
Sindhuli	0
Okhaldhunga	0
Makwanpur	0
Lalitpur	0
Total	**198**

A total of USD 30,367,711 has been committed through these MoUs, however, a very large gap still exists between the needs of MoHP and the support pledged by supporting partners so far. As can be seen in Table 5, districts such as Lalitpur, Okhaldhunga, Sindhuli, and Makawanpur have yet to receive any support. A detailed breakdown of MoU signings for facilities in the various districts, set against reconstruction needs is given in Table 6. Clearly, there is a large gap in many districts, and most efforts to date have been focused on selected districts.

Table 6: Breakdown of MoU types, per district

Districts	Completely Damaged	Partially Damaged	Superficial/No Damage	MoUs for Reconstruction/Repair	MoUs for Medical Equipment	MoUs for service recovery/system strengthening	MoUs for Specialised camps	GAPS for Reconstruction
Bhaktapur	5	6	7	4	4	9	9	-7
Dhading	18	10	17	34	52	53	46	6
Dolakha	32	11	8	25	7	7	7	-18
Gorkha	39	7	11	33	25	15	29	-13
Kathmandu	8	12	44	2	0	0	5	-18
Kavrepalanchok	22	10	29	5	24	0	0	-27
Lalitpur	1	4	11	0	0	0	7	-5
Makawanpur	9	7	27	0	0	0	0	-16
Nuwakot	19	13	14	25	28	28	9	-7
Okhaldhunga	24	14	16	0	6	6	6	-38
Ramechhap	21	11	15	2	13	13	0	-30
Rasuwa	9	4	3	13	4	18	4	0
Sindhuli	15	2	14	0	0	4	23	-17
Sindhupalchowk	43	8	11	55	61	39	38	4
TOTALS	**265**	**119**	**227**	**198**	**224**	**192**	**183**	**-186**

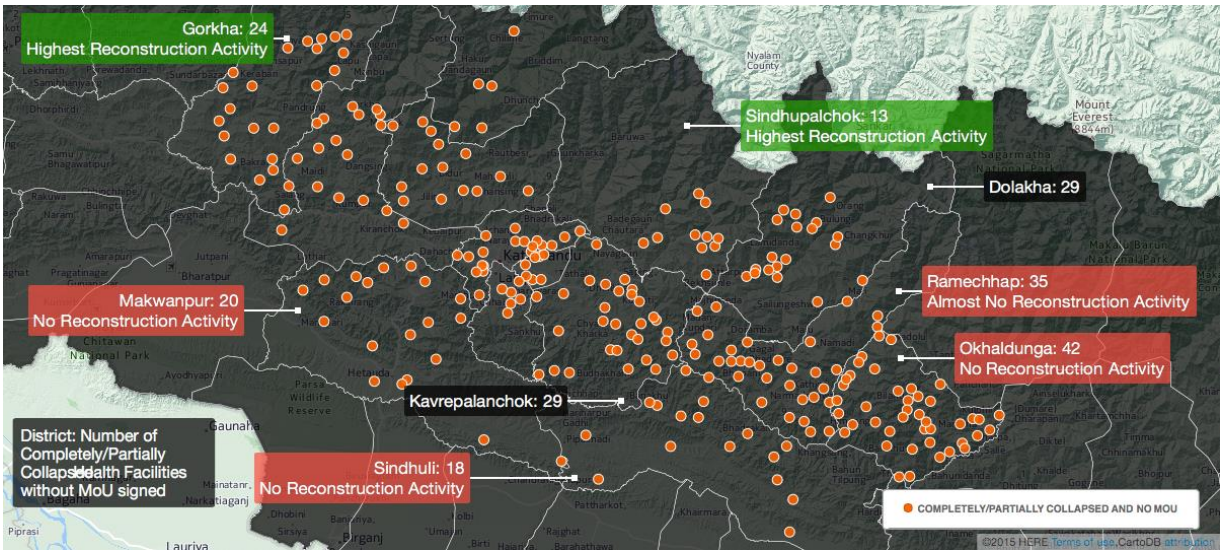

FIGURE 3: DISTRIBUTION OF COMPLETELY/PARTIALLY DAMAGED HEALTH FACILITIES WITHOUT ANY MOUS

Figure 3 depicts each completely/partially damaged facility that has not received any support for reconstruction from external partner organisations.

8. LAND OWNERSHIP

While collecting data for the PDNA, information regarding land ownership of health facilities was not included. Additionally, many of the sub health posts recently upgraded to health posts were reported to have no land. As a result, some facilities were not recommended by MoHP for reconstruction since its policy does not allow for the construction of health facilities on private land or land that has not been authorised for use by a health facility. However, results of the detailed engineering assessments show that most health facilities have their own land, or are at least are located on public land, for which usage rights are comparatively easy to obtain.

Table 7: Land Ownership Status

Land Ownership	Total
Own	375
Private Land	24
Public Land	224
Rent	12
No Land	30
Total	**665**

9. ACCESSIBILITY

Of the health facilities assessed, 19% had no access to any type of road (all weather or seasonal). If we look at the health facilities for which MoUs have been signed, there is a tendency to rebuild/repair those health facilities that have either seasonal or no road access. Only 24% of the health facilities (which are completely/partially collapsed) having all weather road access, are currently planned to be rebuilt/repaired. However, 35% of the health facilities (which are completely/partially collapsed) lacking road access have MoUs for rebuilding/repairing (see Figure 4). This is surprising because data suggest that health facilities with all-weather road access serve a lot more patients, attract more skilled staff and cost less to rebuild. In other words, for every dollar spent, more people can be reached by rebuilding health facilities with all-weather road access than health facilities lacking access roads.

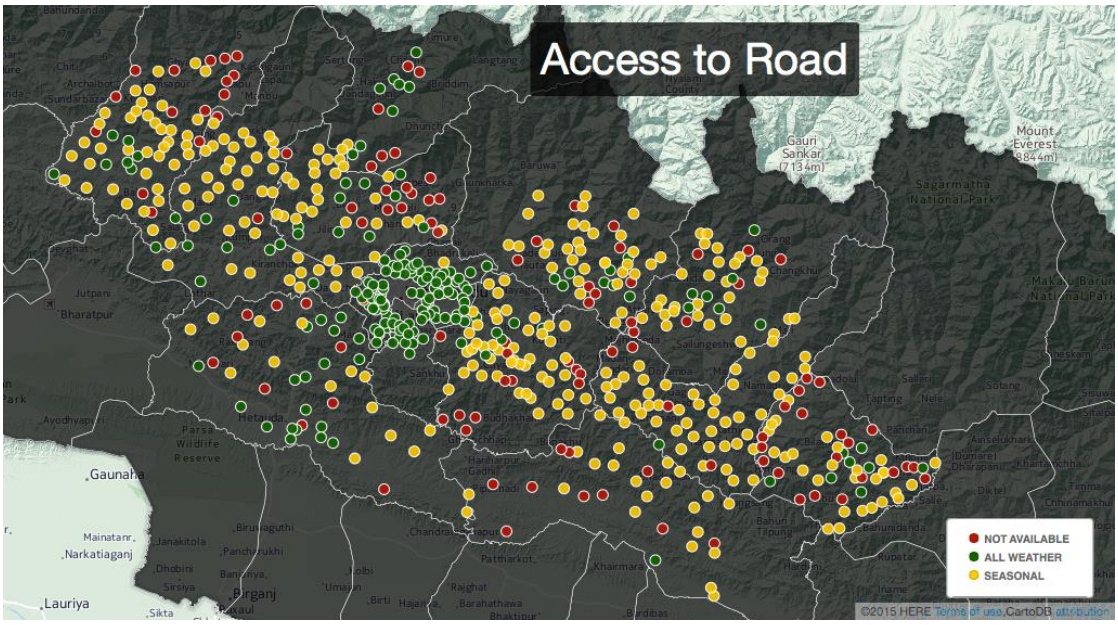

FIGURE 4: ACCESS TO ROAD FOR ALL HEALTH FACILITIES IN ALL DISTRICTS

Rasuwa (38%) and Okhaldhunga (37%) are the districts with the highest percentage of health facilities lacking road access. In general, however, Okhaldhunga (21), Gorkha (15), and Nuwakot (14) rank among the top districts without road access.

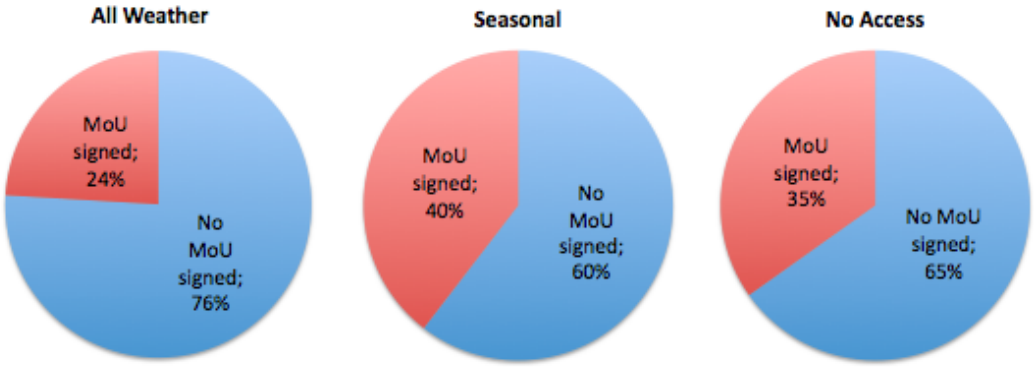

FIGURE 5: ALL THE COMPLETELY/PARTIALLY COLLAPSED HEALTH FACILITIES BY THEIR ROAD ACCESSIBILITY AND WHETHER A MOU HAS BEEN SIGNED.

10. ACCESS TO ELECTRICITY

The engineering assessment shows that 21% of the health facilities do not have access to electricity, with Ramechhap (46%), Okhaldhunga (44%), and Dolakha (30%) being the districts having the highest access (see Figure 6).

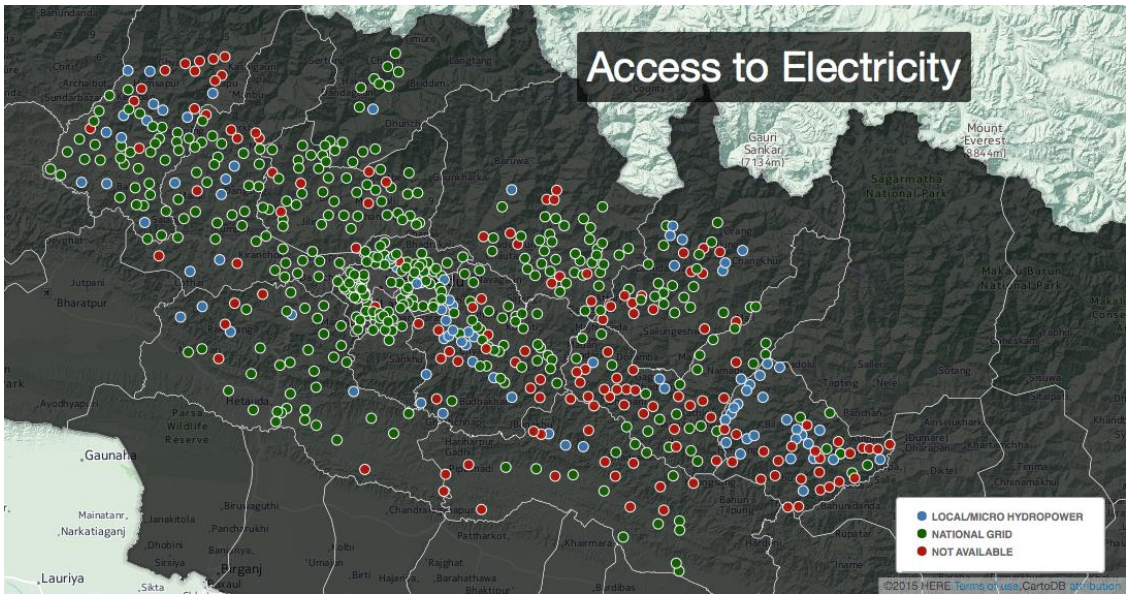

FIGURE 6: ELECTRICITY ACCESS IN HEALTH FACILITIES

11. WINTERISATION NEEDS

The map in Figure 6 shows the altitude of each of the facilities that were assessed. A significant number of health facilities were above 2000m, which would suggest that in the current scenario, they would need winterisation support for the upcoming winter.

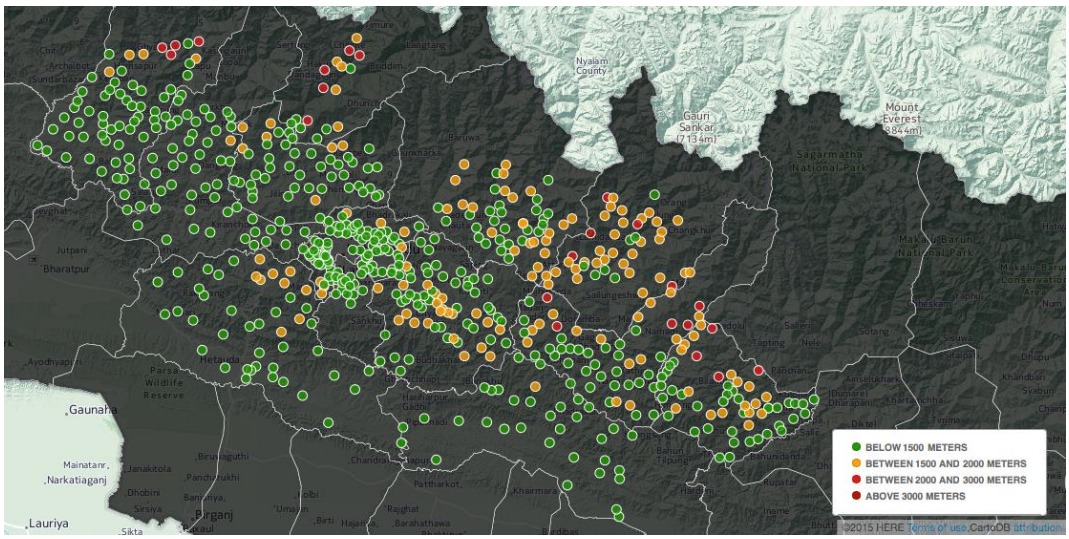

FIGURE 7: ALTITUDE OF THE ASSESSED HEALTH FACILITIES

Dolakha (34 HPs above 1500m) and Sindhupalchowk (24 HPs above 1500m) are the districts which will be the most heavily affected by the winter and therefore need the largest share of winterisation support.

12. NHSSP SPECIFIC INTERVENTION PLAN IN THREE DISTRICTS

As described above, the NHSSP technical infrastructure team is supporting MoHP in the 14 hardest hit districts in terms of planning, coordinating, and monitoring reconstruction and rehabilitation work including the supply of equipment and drugs. Moreover, the technical team has developed standard guidelines for reconstruction works, including architectural, structural, sanitary and electrical designs and the identification of different prefabricated materials suitable for use in Nepal. Furthermore, the team has been monitoring the progress of technical support to the Ministry and supervising some construction activities. The team was assigned to coordinate technically with JICA, KOICA, USAID, KFW, and other External Development Partners (EDPs) who want to support permanent construction in Nepal. Most commitments have already been signed. To support this work, NHSSP has hired one architect for a fixed term, two interns to help the team, and several expert short term consultants.

The technical team is currently carrying out an in depth analysis of all the damaged structures seen in the survey following which MOUs will be signed with interested EDPs for repair and retrofitting. The infrastructure team is also analysing the gaps between the important service provision areas, and reconstruction and repair needs. Once all of the MOUs and needs are finalised, the NHSSP technical team will prioritise the sites for repair and reconstruction based on the budget available and prioritised repair/reconstruction needs.

Plans have also been finalised by the NHSSP gender equality and social inclusion (GESI) team together with district level implementing partners in order to support reconstruction activities in:

Sindhupalchowk:

- Establishment of a one stop crisis management centre (OCMC) at the district hospital. DHO and partners identified the appropriate site for the construction of prefab structure for the OCMC. NHSSP will be responsible for making the prefab structure. For this, the DHO has already sent a request letter to the MoHP.
- The DHO and his team have identified appropriate sites for the establishment of MoHP's newly planned community health units (CHUs). One of the sites among them will be Kharigaun (Saling VDC) where large numbers of internally displaced persons (IDPs) (450 HH) are located. For this, the DHO will send the request letter to the Policy, Planning, and International Cooperation Division, MoHP (PPICD) for prefab construction with the support of NHSSP after ensuring the appropriateness of the said site.

Ramechhap:

- An OCMC will be established in Manthali PHC where two rooms have to be secured for an OCMC prefab structure. The integrated transition and recovery (T&R) plan also provides for the establishment of an OCMC. This has been agreed at a district level meeting with the DHO and the team.

Nuwakot:

- The social service unit (SSU) established in the Trishuli district hospital has been agreed as the place where NHSSP has to secure two rooms in the proposed prefab construction for a SSU. For this, the request has been sent to the PPICD by the DHO.

Gorkha:

- An SSU will be established in Gorkha hospital. There also, the rooms for an SSU have to be secured during the construction of the prefab structure.