NEPAL

A report on the food security impact of the 2015 earthquake

Food Security Cluster

May 2015

Photo cover: WFP/Bharat Shrestha

नेपाल खाद्य सुरक्षा अनुगमन प्रणाली
Nepal Khadhya Surakshya Anugaman Pranali (NeKSAP)
Nepal Food Security Monitoring System

NEPAL FOOD SECURITY CLUSTER
Strengthening Humanitarian Response

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ABOUT THIS REPORT

This report highlights the findings of a household food security assessment as well as district food security network meetings carried out between 8-20 May to inform the food security response for the Nepal 2015 earthquakes.

The assessments were carried out with overall coordination from the Government's Nepal Food Security Monitoring System (NeKSAP) with technical support from the United Nations World Food Programme (WFP) and the Food Security Cluster.

The publication of this report was made possible thanks to financial contributions from the European Union and the World Food Programme.

The Nepal Food Security Monitoring System (NeKSAP) is funded by the European Union. The views expressed in this publication do not necessarily reflect the views of the European Commission.

A REPORT OF:

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KEY MESSAGES

The earthquake has severely impacted food security, with an estimated 1.4 million people in need of food assistance (excluding Kathmandu Valley). The majority of these live in the most heavily damaged areas along the seismic belt (almost 1.1 million people), with the remaining living in the severely affected but sparsely populated remote mountain areas (90,000 people), and in the less severely damaged but highly dense southern areas (250,000 people).

Food security has deteriorated in all affected areas, and is particularly worrying in remote mountain areas, where close to 70 percent of households have poor or borderline food consumption, and close to half have poor diet diversity. Households across all affected areas are resorting to negative food-based coping strategies, particularly reducing portion sizes and meal frequency.

Food assistance has played a critical role in ensuring that food insecurity does not escalate further: food assistance is the main source of cereals and pulses for close to 40 percent of surveyed households. While reaching remote, highly affected areas with no road access has been very challenging, humanitarian agencies are now using helicopters and porters to access these "unreachable" areas.

A major concern for both immediate and longer term food security are widespread losses of household food stocks. In the most food insecure areas, 80 percent of households have lost their entire food stocks, and overall 55 percent of households have lost more than half of their cereal stocks. Using baseline data on average food stocks available at this time of the year, this translates into an estimated total of 52,000 MT of lost grain stocks.

Crop production and livestock rearing are the primary livelihoods for almost two thirds of households in the affected areas. While damage to fields and standing crops have been less severe than originally expected (22 percent of households lost more than half of their standing crops), widespread seed losses and damage to agricultural tools are a major concern.

Households dependent on daily labour and trade have been amongst the most affected in terms of income, with over two thirds reporting income losses of over 30 percent since the earthquake.

Food markets are now largely functional in less affected areas and are fast recovering in the seismic belt. In remote mountain areas, however, markets remain mostly closed or difficult to access for both suppliers and households, due to destroyed roads or landslide risk. The upcoming monsoon is likely to exacerbate market access constraints in these areas.

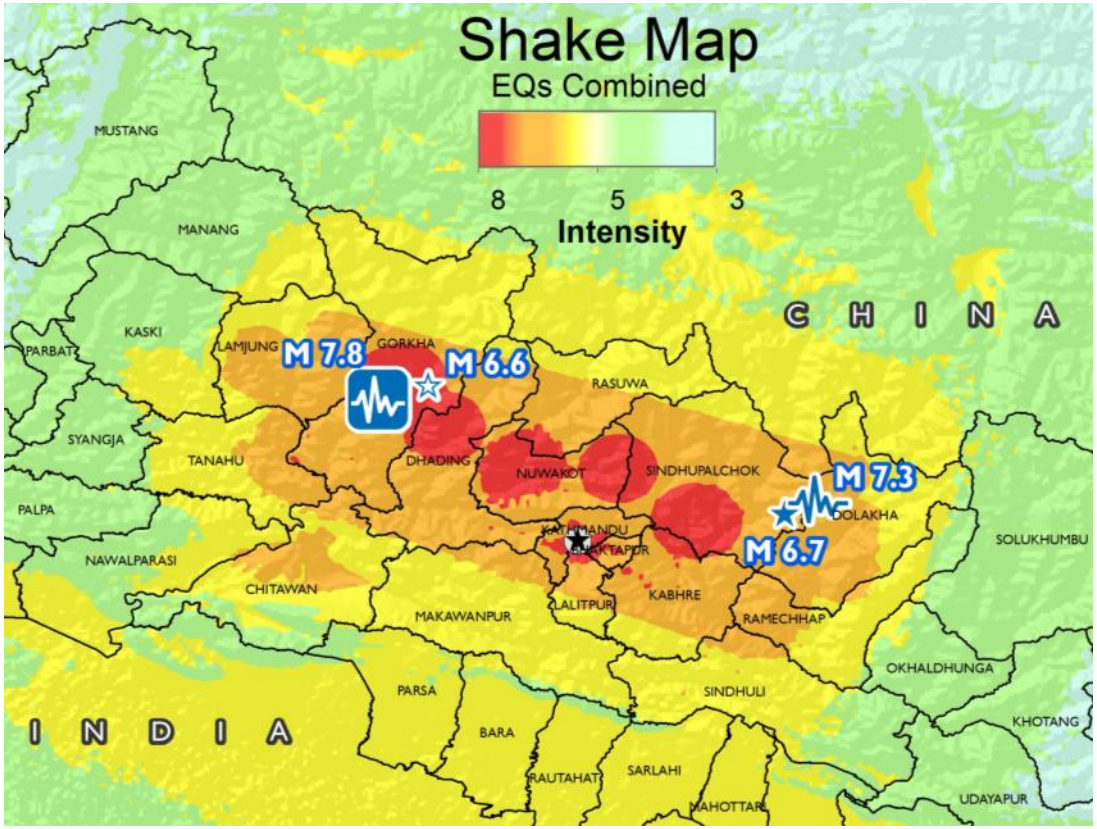
BACKGROUND

A magnitude **7.8 earthquake** struck Nepal on 25 April 2015. This was followed by several powerful aftershocks, including a major one (7.3 magnitude) on 12 May.

Over **8,000 deaths** have been confirmed and over 19,000 people have been injured.

Over 750,000 buildings have been completely or partially destroyed, with critical infrastructure such as bridges, hospitals and schools heavily damaged.

The earthquake has had **severe humanitarian implications** in terms of shelter, food security, health and sanitation, and access to basic services.



Source: United States Geological Survey (USGS)

OPERATIONAL PROFILE

The resilience of the Nepali population is remarkable: despite widespread loss of lives, livelihoods, and assets, the affected communities are working hard to restore normalcy.

Despite recent progress to rebuild affected areas, housing remains a key concern. Powerful aftershocks in the weeks following the 25 April earthquake have triggered fear of further destruction, even in areas where housing damage has been minimal.

The effect of the earthquakes on food security has also been significant, with widespread loss of food stocks and severe disruptions to market functionality and access in some areas. The current landslides and the expected worsening of road and trail conditions during the upcoming monsoon season is also of significant concern.

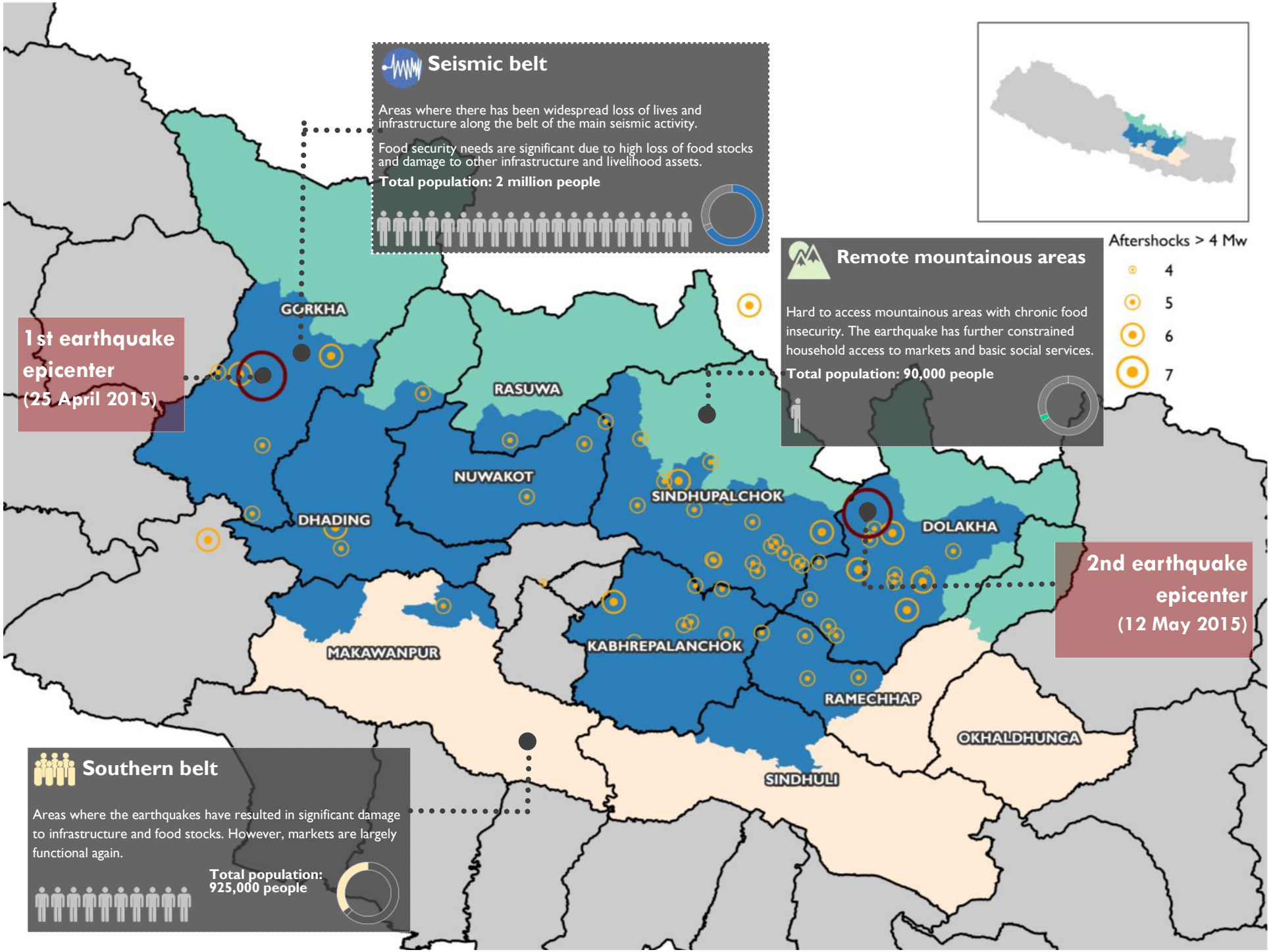
The topography of the hills and mountains in western and central Nepal, where the major earthquakes on 25 April and 12 May and most of the subsequent aftershocks were concentrated, is diverse, with a range of 135 meters at the lowest point in Sindhuli district to 8093 meters at the highest point in Gorkha district.

Within the 11 districts worst affected by the earthquake geographic areas can be broadly categorized into three domains, or operational profiles, based on seismic activity, population density, elevation, transportation access, market infrastructure and livelihoods.

DOMAIN 1 - Seismic belt: Communities living in the densely populated areas most immediately impacted by the earthquakes and aftershocks, which suffered high loss of life and widespread destruction of housing, food stocks, infrastructure, and livelihood assets. Food markets in these areas were severely affected — in terms of both supply and demand — but are fast recovering.

DOMAIN 2 - Remote mountainous areas: Communities in hard to reach, less densely populated mountainous areas, which are chronically food insecure under normal circumstances. The earthquakes have resulted in extensive housing damage and affected agricultural livelihoods, as well as functionality and access to markets due to road and trail closures and landslide risks.

DOMAIN 3 - Southern belt: Communities living in densely populated areas with weak infrastructure. The earthquakes have resulted in widespread damage to housing and some infrastructure. Food markets are now largely functional again, despite initial infrastructure damage.


Seismic belt
Areas where there has been widespread loss of lives and infrastructure along the belt of the main seismic activity.
Food security needs are significant due to high loss of food stocks and damage to other infrastructure and livelihood assets.
Total population: 2 million people
Remote mountainous areas
Hard to access mountainous areas with chronic food insecurity. The earthquake has further constrained household access to markets and basic social services.
Total population: 90,000 people
Aftershocks > 4 Mw
4
5
6
7
1st earthquake epicenter (25 April 2015)
2nd earthquake epicenter (12 May 2015)
GORKHA
RASUWA
NUWAKOT
DHADING
SINDHUPALCHOK
DOLAKHA
MAKAWANPUR
KABHREPALANCHOK
RAMECHHAP
OKHALDHUNGA
SINDHULI
Southern belt
Areas where the earthquakes have resulted in significant damage to infrastructure and food stocks. However, markets are largely functional again.
Total population: 925,000 people

FOOD SECURITY

The food security situation has deteriorated across much of the affected area, with significant damage to household food stocks and a fall in incomes. Reliance on food assistance remains high.

Food security across the affected areas remains a key concern. Almost 70 percent of households indicate partial or total loss of their food stock space.

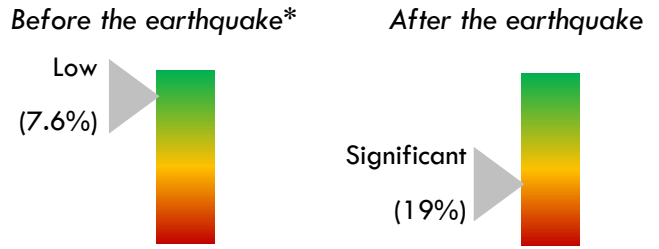
Even when areas where food assistance has already been provided are included, a significant majority of households (71 percent) indicated that food was a critical need, highlighting the continued need for food assistance.

Food assistance has played a critical role in ensuring that communities maintain a stable diet: for cereals and pulses, 38 percent and 35 percent of households reported food assistance as the main source of food.

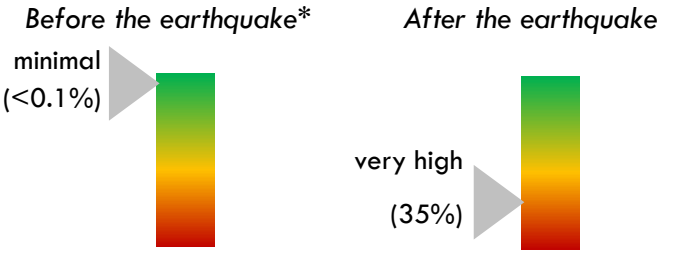
However, even with food assistance, food consumption remains unacceptably low in most areas—particularly in mountainous regions. Many households are resorting to consumption-based coping strategies: on average, 35 percent of households limit meal portions or reduce the number of meals. Many households also reported eating less preferred foods and limiting adult intake to provide for young children. More extreme coping strategies, such as not eating during the entire day, are less frequent.

It is clear that in the absence of food assistance, the situation could deteriorate very rapidly.

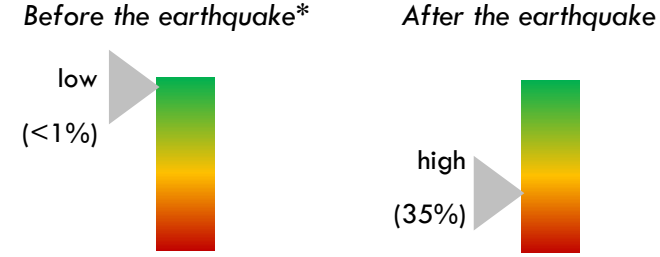
POOR FOOD CONSUMPTION (% of households)



RELIANCE ON FOOD ASSISTANCE (% of households)



USE OF NEGATIVE COPING STRATEGIES (% of households)



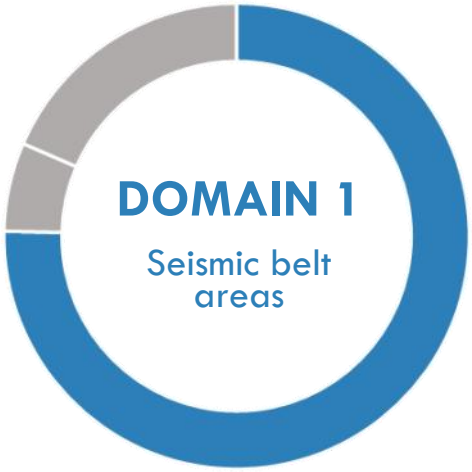
* from 2013/2014 NeKSAP household survey

A total of 275,500 food insecure households (1.4 million people) in need of assistance were identified. These are households that have poor food consumption, are reducing meal portions or limiting meal frequency (See column 6 in the *Statistical Profile*).

Impact in numbers:

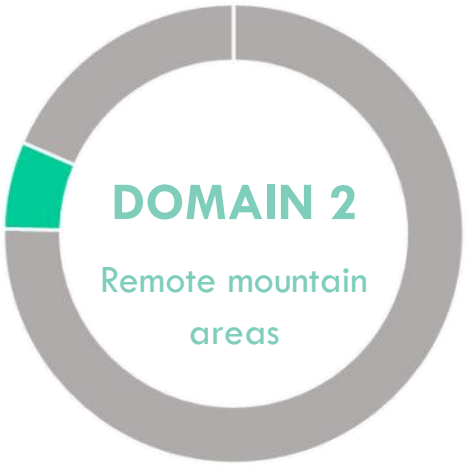
Total affected population:	3 million
People in need of food assistance:	1.4 million
Households in need of food assistance:	275,500

Within each domain, the target numbers of people requiring food assistance are as follows:



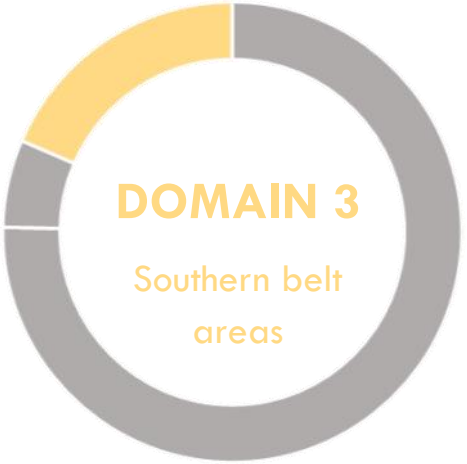
Population in need:

1,060,000



Population in need:

90,000



Population in need:

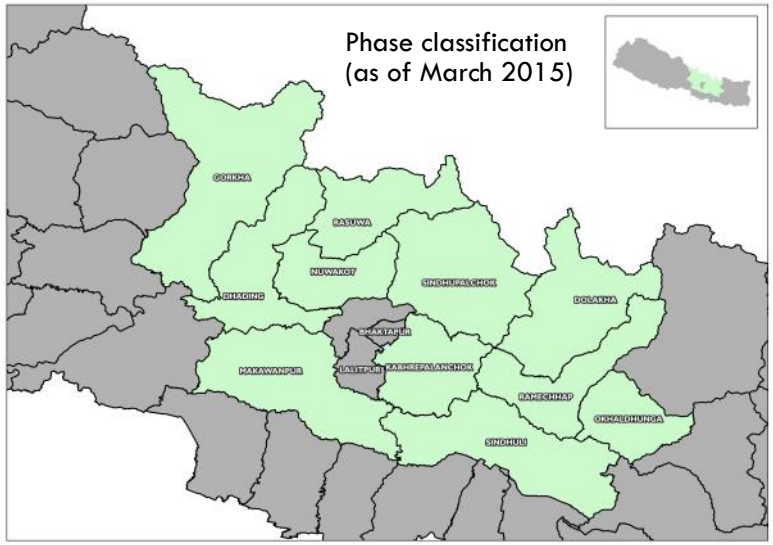
250,000

Acute Phase Classification

The NeKSAP district food security network system was activated between 8 and 20 May 2015 and an acute food security phase classification exercise was carried out in earthquake affected districts. The network meetings are chaired by the Chief District Officer. The Secretariat is formed by the District Agricultural Development Office. Participants include local government officials representing different relevant line-ministries, locally operating NGOs and the private sector. On average between 30-40 people participated in the district food security network meetings.

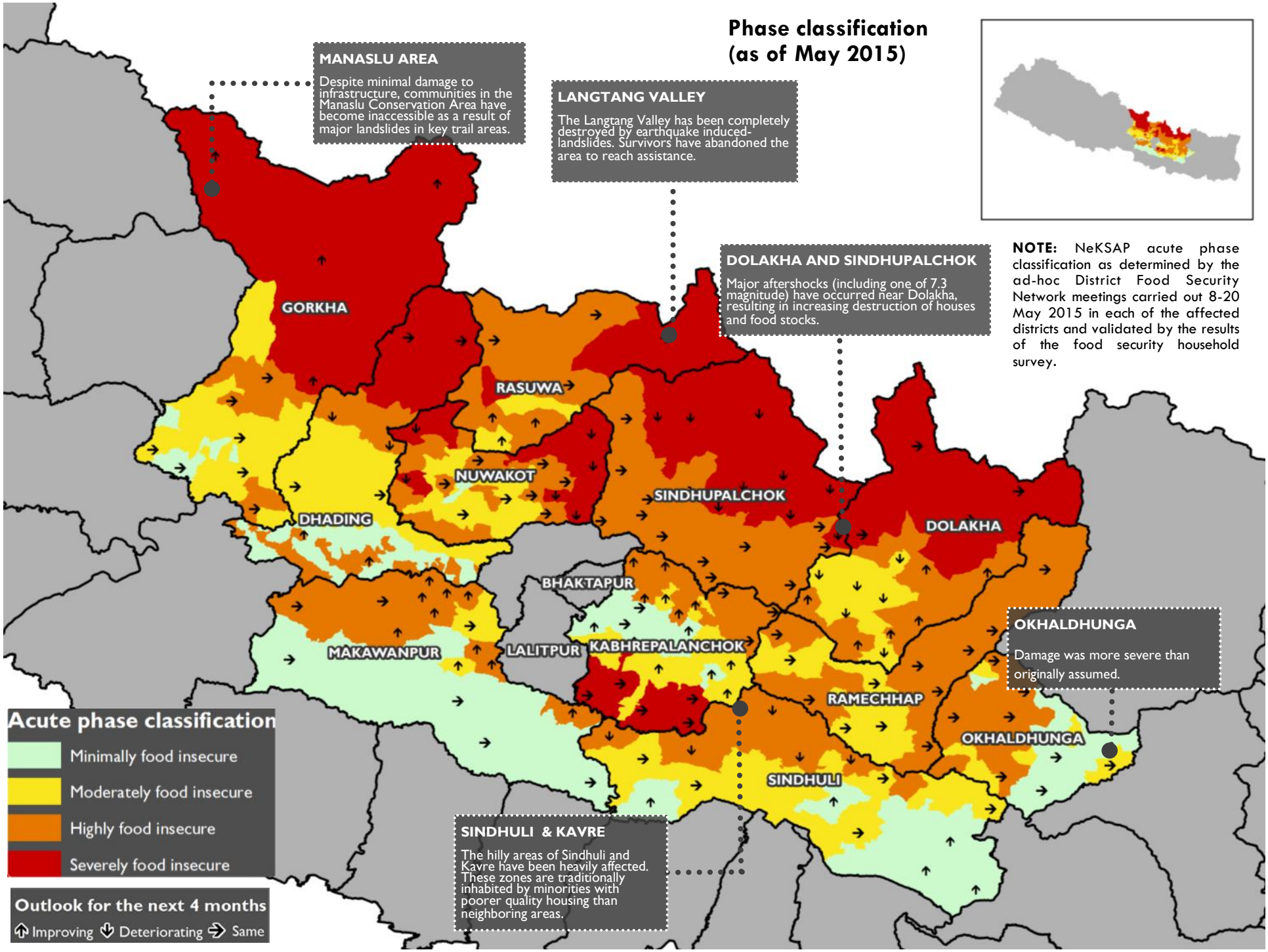
The NeKSAP phase classification uses a framework of 17 indicators to derive the acute food security phase classification at the Village Development Committee (VDC) level. A full description of the NeKSAP phase classification process is available at: www.neksap.org.np.

The individual district phase classification maps were combined into one map of the impacted area. Subsequently, data from the household food security assessment were used to validate the phase classification outcomes. Food security outcome indicators by phase classification are presented on pages 9 and 10.



The map above shows the acute food security phase classification prior to the earthquake. The results indicate minimal food security concerns. All 627 VDCs in the 11 most affected districts were classified as minimally food insecure in March 2015.

The situation has changed dramatically since the earthquakes. Following the phase classification exercise carried out in May 2015, 80 VDCs are now classified as severely food insecure, 271 VDCs as highly food insecure and 181 VDCs as moderately food insecure.


Phase classification
(as of May 2015)
MANASLU AREA
Despite minimal damage to infrastructure, communities in the Manaslu Conservation Area have become inaccessible as a result of major landslides in key trail areas.
LANGTANG VALLEY
The Langtang Valley has been completely destroyed by earthquake induced-landslides. Survivors have abandoned the area to reach assistance.
DOLAKHA AND SINDHUPALCHOK
Major aftershocks (including one of 7.3 magnitude) have occurred near Dolakha, resulting in increasing destruction of houses and food stocks.
NOTE: NeKSAP acute phase classification as determined by the ad-hoc District Food Security Network meetings carried out 8-20 May 2015 in each of the affected districts and validated by the results of the food security household survey.
GORKHA
RASUWA
NUWAKOT
DHADING
SINDHUPALCHOK
DOLAKHA
BHAKTAPUR
MAKAWANPUR
LALITPUR
KABHREPALANCHOK
RAMECHHAP
OKHALDHUNGA
SINDHULI
OKHALDHUNGA
Damage was more severe than originally assumed.
SINDHULI & KAVRE
The hilly areas of Sindhuli and Kavre have been heavily affected. These zones are traditionally inhabited by minorities with poorer quality housing than neighboring areas.
Acute phase classification
Minimally food insecure
Moderately food insecure
Highly food insecure
Severely food insecure
Outlook for the next 4 months
Improving
Deteriorating
Same

FOOD SECURITY INDICATORS

Poor & borderline food consumption
(FCS<42)

Poor dietary diversity

SEVERELY FOOD INSECURE (PHASE 4)

240,000 *(total population)*

66%

46%

HIGHLY FOOD INSECURE (PHASE 3)

1.1 million *(total population)*

52%

26%

MODERATELY FOOD INSECURE (PHASE 2)

930,000 *(total population)*

43%

16%

MINIMALLY FOOD INSECURE (PHASE 1)

774,000 *(total population)*

38%

8%

Coping strategies employed at least once in the past week

No availability of all food items (cereals, pulses, oil, vegetables) and access to market >2 hours away.

Based on field monitors' observations.

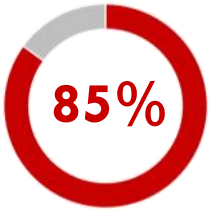
Reduce meal portions

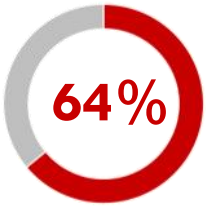
Limit number of meals

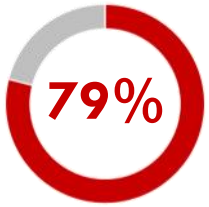
Stored food completely lost

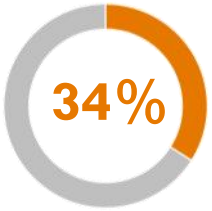
No food market access

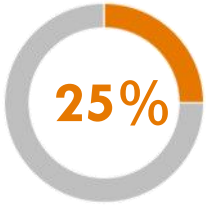
Need immediate food assistance

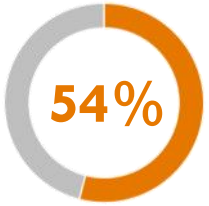


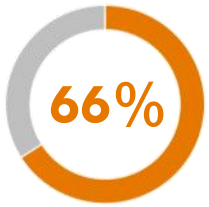


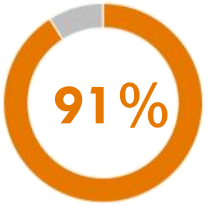


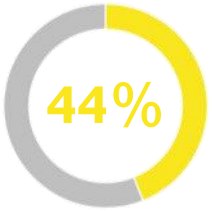


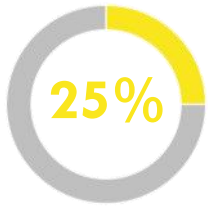


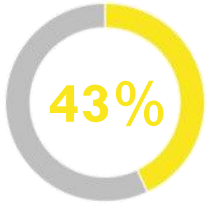


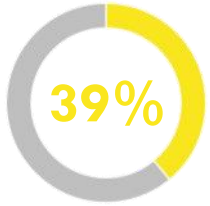


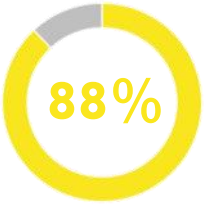


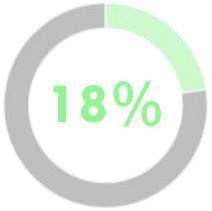


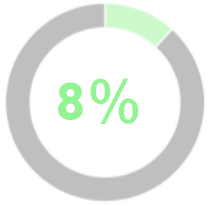


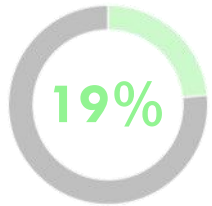


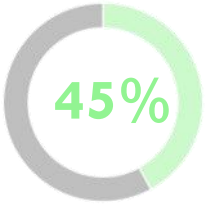












THE "UNREACHABLE" AREAS

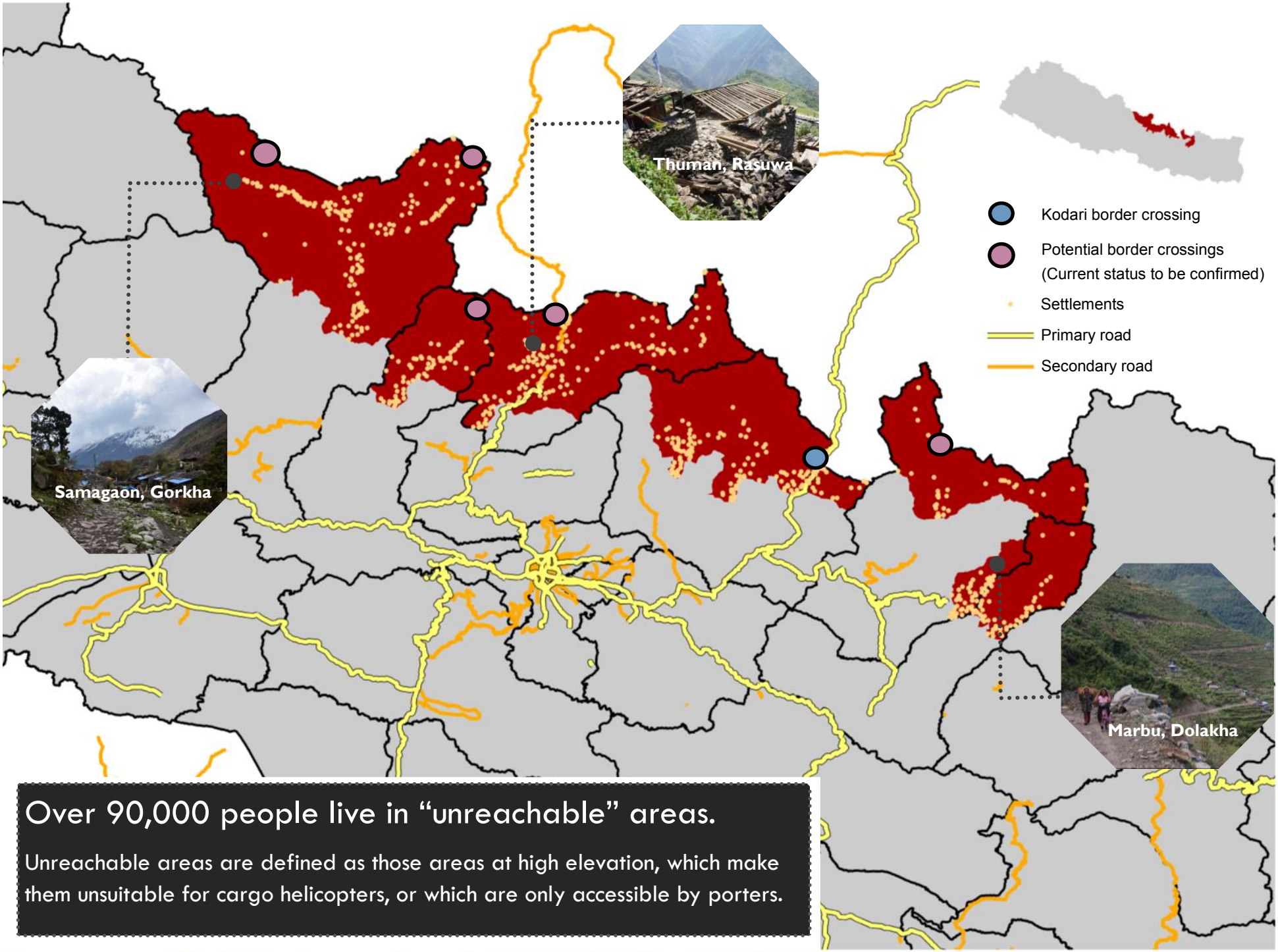
A sizeable proportion of the affected population—particularly those living in remote mountainous areas—is located in inaccessible areas. Food security in these areas has been severely affected, as markets have either closed or become inaccessible.

Despite causing relatively less severe damage to infrastructure and housing than in the seismic belt, the earthquake had a severe impact on food security in the remote mountainous areas. Many trails connecting remote communities to markets and larger settlements have been destroyed. Many of these areas have therefore become unreachable, except by helicopter or several days of trekking along dangerous routes.

At these altitudes, cropping is largely limited to potato and barley. Livestock rearing—particularly of cattle and equines—is also a key livelihood. Trading communities in the upper mountains traditionally exchange potatoes and barley for rice and pulses with the hill communities in April and May.

Most of the main markets serving these areas have either been destroyed or have yet to re-open due to lack of supply. Even when markets have re-opened, households are often unable to reach them due to destroyed trails and the risk of landslides on the way. The upcoming monsoon season will exacerbate these access constraints, and make the delivery of food assistance to these "unreachable" communities even more challenging.

Some communities in remote mountainous areas remain very difficult to reach. Photo: WFP/Krishna Krishnamurthy



Over 90,000 people live in "unreachable" areas.

Unreachable areas are defined as those areas at high elevation, which make them unsuitable for cargo helicopters, or which are only accessible by porters.

LIVELIHOODS AND INCOME

Livelihoods, especially daily agricultural and non-agricultural labour, have been severely affected, with income losses of over 75 percent reported in several areas.

The earthquake had a significant impact on livelihoods across all affected areas. Livelihoods in the seismic belt—which suffered heavy infrastructure damage— and the mountainous areas, were particularly affected. Loss of incomes has led to a drop in expenditures, especially in the poorest communities. Overall household expenses decreased by an average of13 percent.

Food expenses specifically have been particularly affected, which explains why food consumption and diet diversity have dropped. In the seismic belt, per capita food expenses decreased by 17 percent, possibly as families shifted spending towards house reconstruction. The decrease in mountainous areas was even more severe, at 43 percent, probably due to limited access to functional markets. In the southern areas below the earthquake belt, food expenses remained similar to pre-earthquake.

The key income sources in the affected areas are crop production and livestock rearing, with almost two thirds of surveyed households engaged in one or both of these. Fortunately, standing crops and livestock have not been severely affected (see section on *Agriculture*).

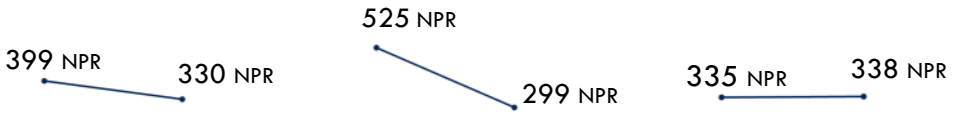
Households dependent on daily labour, however, have been significantly affected. The demand for daily labour (both agricultural and non-agricultural) has decreased significantly due to the earthquake—possibly as former employers are now using wage money to rebuild their homes or lost assets. Over two thirds of people who depend on daily labour reported income losses over 30 percent, with one third reporting complete loss of income. As a consequence, food consumption patterns have deteriorated significantly; more than one third of labour dependent households have poor food consumption.

Not surprisingly, traders have also been severely affected, with over two thirds reporting income losses of over 30 percent. In addition to physical damage to their shops and disrupted supply flows, many traders have suffered from a dramatic drop in demand from households—caused by a combination of inability to reach markets, lack of cash, and reliance on assistance. Demand did increase in some markets right after the earthquake, due to local purchases by relief agencies, but mostly in less affected areas and in major markets only.

Livelihood asset losses

Asset	% agricultural households reporting losses
Plough	*26%*
Spade	*43%*
Sickle	*41%*
Doko	*49%*
Tractor	*<1%*
Livestock shelter	*35%*
Carts	*1%*
Water tanks	*16%*

CHANGE IN PER CAPITA WEEKLY EXPENSES ON FOOD, BEFORE AND AFTER THE EARTHQUAKE



Seismic belt (Domain 1)

Remote mountains (Domain 2)

Southern belt (Domain 3)

GENDER CONSIDERATIONS

Evidence suggests that women's food consumption is most at risk when household access to food diminishes.

Women are the first household members to reduce the frequency of meals, size of meals and diversity of food when access to food is insufficient. Pregnant and lactating women are at particular risk due to their higher nutritional requirements. UNICEF reports that around twelve babies are being born every hour without access to basic healthcare in the worst affected areas. Poor access to health services compounds the overall vulnerability of these women and children.

In rural areas with high pre-earthquake rates of out-migration, many women (and in some cases children) are the sole household provider. The share of female headed households appears to have increased since the earthquake: 13 percent of surveyed households were female-headed, compared to the pre-earthquake average of 10 percent. These women now face increased pressures to rebuild their homes, while taking care of their crops or working as daily labourers, as well as taking care of their children.

Fifty three percent of female headed households have either poor or borderline food consumption, compared to 44 percent for male headed households – an almost 10 percentage point difference.

AGRICULTURE

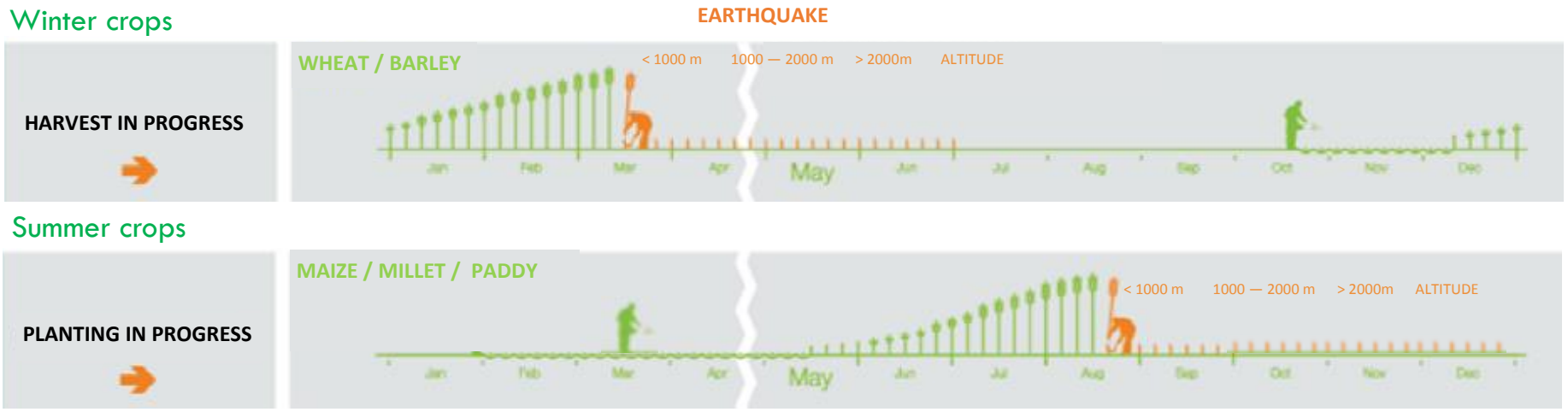
Loss of stored crops, seeds and agricultural tools threatens both immediate and longer term household food security.

Agriculture is the dominant livelihood activity in the affected areas, with around 70 percent of surveyed households engaging in crop production and almost all households in rural areas owning land. While the use of irrigation is limited (only 25 percent of surveyed households used irrigation), damage to irrigation facilities seems to have been extensive (27 percent of households that have access to irrigation reported severe damage to their irrigation infrastructure).

At lower altitudes (below 2000 m), most winter crops (wheat and barley) were already harvested when the earthquake hit, and planting of the summer crops (paddy, maize and millet) had started.

At higher altitudes, winter crops are due to be harvested in May and June. These months cover the lean period, during which household food stocks are low and households depend heavily on markets to buy food. With most food stocks lost and markets still not functional or difficult to access, the food security of households in these mountain areas in the coming months is of concern.

CROPPING CALENDAR (Source: GIEWS FAO)



Standing crops

Crop	% agricultural HHs that lost standing crops			
	Lost <25%	*Lost 25-50%*	*Lost 50-75%*	*Lost >75%*
Rice	*73%*	*6%*	*10%*	*11%*
Maize	*79%*	*13%*	*5%*	*3%*
Wheat	*55%*	*16%*	*18%*	*10%*
Potato	*60%*	*22%*	*6%*	*12%*
Millet	*67%*	*3%*	*1%*	*29%*

Standing crop losses have been moderate. This applies to crops still to be harvested in higher altitude areas (wheat, barley and potato) as well as newly planted summer crops in lower altitude areas (maize). Standing crop losses have been due mainly to landslides, hailstorms, over-maturation of grain and grazing by animals set free upon destruction of the shelter. There is however a risk of further crop losses due to reduced availability of agricultural labour, use of fertilizers (from households' lost stocks or limited access), and irrigation, as well as post-harvest losses due to inadequate storage.

Stored cereals (all)

Crop	% agricultural HHs that lost stored cereals			
	Lost	*Lost 25-*	*Lost 50-*	*Lost*
Rice	*34%*	*11%*	*18%*	*36%*
Maize	*32%*	*14%*	*19%*	*34%*
Wheat	*38%*	*9%*	*17%*	*36%*
Potato	*28%*	*14%*	*28%*	*30%*
Millet	*25%*	*12%*	*17%*	*45%*

However **losses to stored crops were substantial.** 40 percent of households report that more than half of rice and maize stocks were lost. According to the regular NeKSAP monitoring data, the average edible cereal stock at the household level at this period of the year is approximately 218 kg per household, sufficient for more than 3 months of staple food. Using these figures, it can be estimated that a total of 52,000 MT of food stocks at the household level have been lost.

Seeds

Crop	% agricultural HHs that lost seeds			
	Lost <25%	*Lost 25-50%*	*Lost 50-75%*	*Lost >75%*
Rice	*34%*	*7%*	*13%*	*46%*
Maize	*46%*	*11%*	*10%*	*33%*
Wheat	*30%*	*7%*	*14%*	*49%*
Potato	*35%*	*12%*	*17%*	*36%*
Millet	*27%*	*7%*	*12%*	*54%*

Seed losses were high. The most urgent seed needs are for paddy (early June), maize in higher areas (June), millet (June-July), and potato (September). The planting window is becoming narrower with the start of the raining season for these crops.

Overall, **losses of most animals** (oxen, cattle, equines, pigs, sheep and goats) were reported by households as low (6-13 percent), although poultry loss was high (31 percent). There is a risk of further livestock mortality due to injuries, diseases, and poor health conditions due to lack of shelter and undernutrition.

MARKETS

Markets are now functional in less affected areas and are fast recovering along the earthquake belt, but remain largely closed in the remote mountain areas.

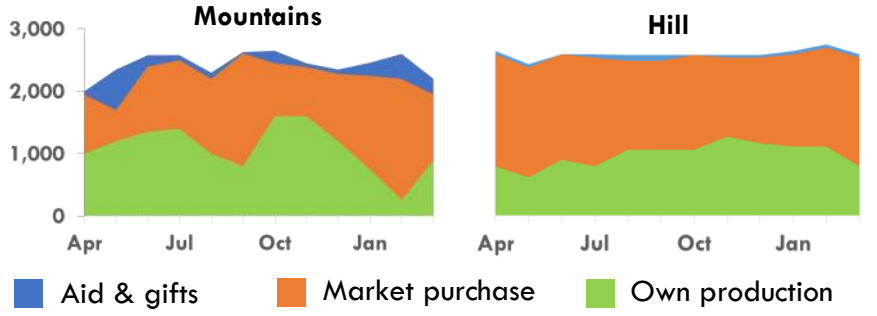
At the macro level, key supply routes from India and the Terai have been re-established. At the micro level, market functionality is still limited but rapidly improving in the earthquake belt, where 70% of households reported that cereals and pulses are currently available in their normal market. However, the second earthquake led to new market closures in Sindhupalchok, Dolakha and northern Ramechhap. In the mountain areas (Domain 2), most markets are still closed, with only 5% of households able to find cereals and pulses in the nearest market.

The importance of markets in meeting food needs has varied across different areas since the earthquake:

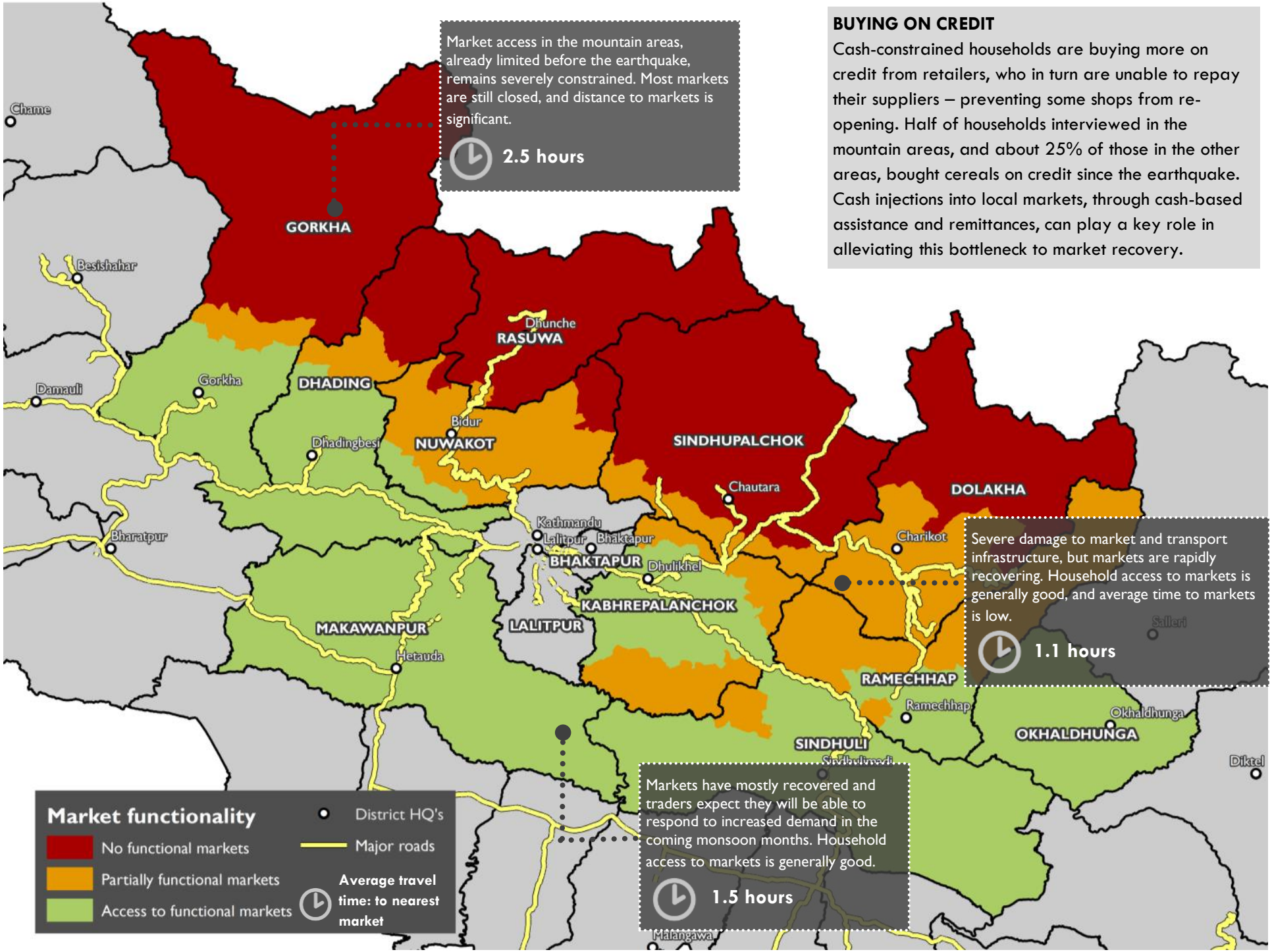
% OF HOUSEHOLDS WHO OBTAINED CEREALS AND PULSES FROM MARKETS

Physical access to markets in the earthquake belt (Domain 1) and below (Domain 3) is improving: 76% of households in these areas have access to a market less than 2 hours away (one way travel time). In the mountainous areas, access– already difficult before the earthquake – remains limited, with only 35% of households able to reach a market in less than 2 hours.

TYPICAL SOURCE OF MONTHLY KCAL CONSUMPTION (SOURCE: NLSS, 2010/11)



Economic access– or households' ability to buy food – is a major concern across all affected areas. Currently, prices for staple foods in functioning markets are generally normal (i.e. <10% higher than usual for this time of the year), in part due to the good rice harvest last year. However, prices are expected to rise in the coming month, due to increased household demand if relief assistance declines, and increased transport costs during the monsoon. In this context, a major concern is households' lack of cash, due to lost income sources, lost savings in house rubble, or sharing with relatives.


Market access in the mountain areas, already limited before the earthquake, remains severely constrained. Most markets are still closed, and distance to markets is significant.
2.5 hours
BUYING ON CREDIT
Cash-constrained households are buying more on credit from retailers, who in turn are unable to repay their suppliers – preventing some shops from re-opening. Half of households interviewed in the mountain areas, and about 25% of those in the other areas, bought cereals on credit since the earthquake. Cash injections into local markets, through cash-based assistance and remittances, can play a key role in alleviating this bottleneck to market recovery.
Chame
GORKHA
Besishahar
Dhunche
RASUWA
Damauli
Gorkha
DHADING
Bidur
NUWAKOT
Dhadingbesi
SINDHUPALCHOK
Chautara
DOLAKHA
Kathmandu
Lalitpur
Bhaktapur
Bharatpur
BHAKTAPUR
Dhulikhel
Charikot
KABHREPALANCHOK
MAKAWANPUR
LALITPUR
Hetauda
Severe damage to market and transport infrastructure, but markets are rapidly recovering. Household access to markets is generally good, and average time to markets is low.
1.1 hours
Sallerí
RAMECHHAP
Ramechhap
Okhaldhunga
OKHALDHUNGA
SINDHULI
Diktel
Markets have mostly recovered and traders expect they will be able to respond to increased demand in the coming monsoon months. Household access to markets is generally good.
1.5 hours
Malangawa
Market functionality
No functional markets
Partially functional markets
Access to functional markets
District HQ's
Major roads
Average travel time: to nearest market

POPULATION MOVEMENT

There has been widespread population movement since the earthquake, yet few households expressed intention to relocate.

There have been significant population flows in and around earthquake affected areas since the first earthquake occurred on the 25 April. Flowminder.org compared data taken from the day before the earthquake with data taken on May 1. Population flows due to the earthquake are expected to change over the weeks to come. Nonetheless, understanding inflow-and-outflow is critical for estimating population size when considering needs.

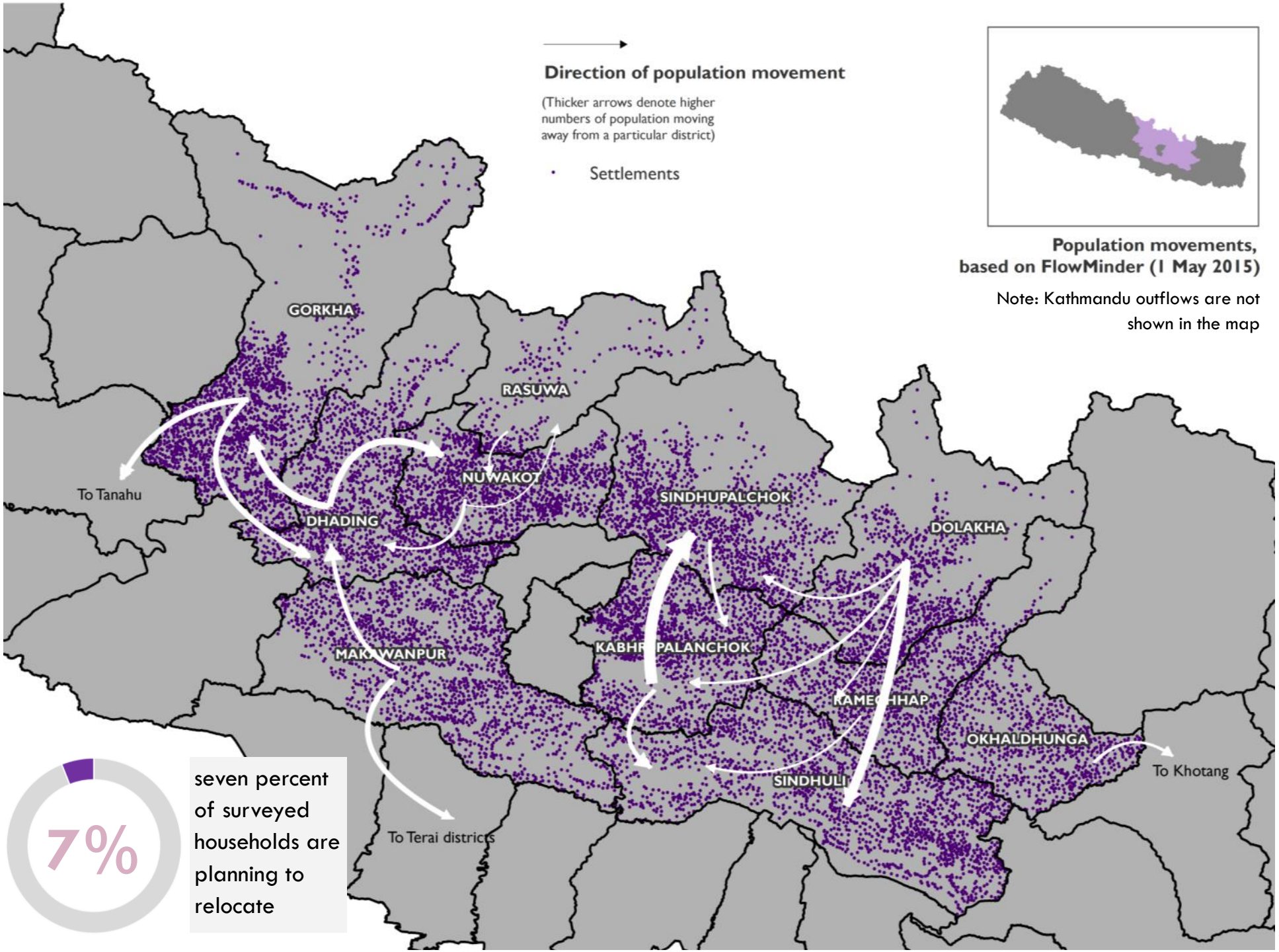
The greatest outflows have been from Kathmandu by people returning to rural areas –in particular the Terai. The greatest inflows have been in to the most affected areas, presumably as family members return home to help or assist their villages. Aid workers are also considered in the inflow data but represent a relatively small number of people. There have also been unusual population out-flows from affected areas, for instance there are greater than normal flows from Gorkha into Dhading and Tanahau but this is far outweighed with people from Dhading and Kathmandu coming into Gorkha. A large proportion of the population has also moved from Kavre into Sindhupalchok—possibly in search of relatives.

It is expected that over the coming months much of the outflow from Kathmandu will return back into the Valley, as fears of aftershocks and outbreak of disease dissipate and people return to Kathmandu to work. While these population flows are relatively reliable at district level, at a VDC level the in-flow and out-flow between villages varies considerably. Some villages in earthquake affected areas are now virtually completely empty, while others have seen increases as relatives have returned home.

Of the surveyed households, only seven percent are planning to relocate, indicating that the majority of households that were planning to relocate have already done so.

IMPACT ON HUMANITARIAN NEEDS

WFP and other actors will need to ensure that programme planning takes into consideration the areas where the population has increased. Actors must also be careful to undertake assessments at village level to ensure that assistance is provided at a reduced rate in areas where most people have left. WFP will continue to work with FlowMinder.org to get updated population movement data to guide decision making.



Population movements, based on FlowMinder (1 May 2015)

Note: Kathmandu outflows are not shown in the map

seven percent of surveyed households are planning to relocate

ASSISTANCE

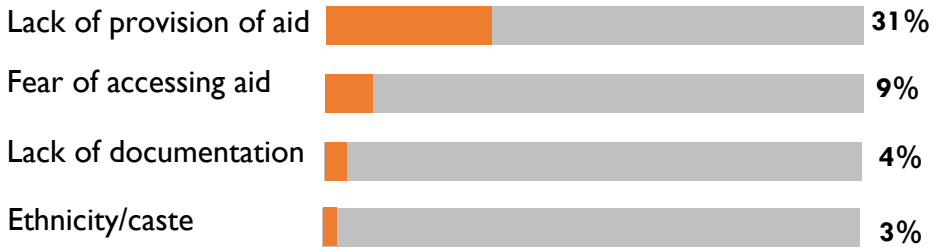
Scale-up of humanitarian assistance has been important to ensure stable food security conditions. Certain areas pose significant challenges to provide the necessary food assistance due to inaccessibility.

A month after the 25 April earthquake, the food security cluster has collectively assisted over two million people. In addition, smaller organisations have reached tens of thousands of people. However, a number of villages are still cut off from road and air access and have not yet been reached (see section on *The Unreachable Areas*). In those areas, WFP and cluster members are partnering with mountain climbers, local porters and pack animals to deliver food.

WFP and partners initially focused on the most heavily affected districts of Gorkha, Dhading, Nuwakot, Rasuwa, Sindhupalchok, Dolkha and Kabhre. Following the second major earthquake, which occurred on 12 May east of the first one, the Government of Nepal requested additional assistance in Ramechhap, Makawanpur, Okhaldhunga, and Sindhuli districts.

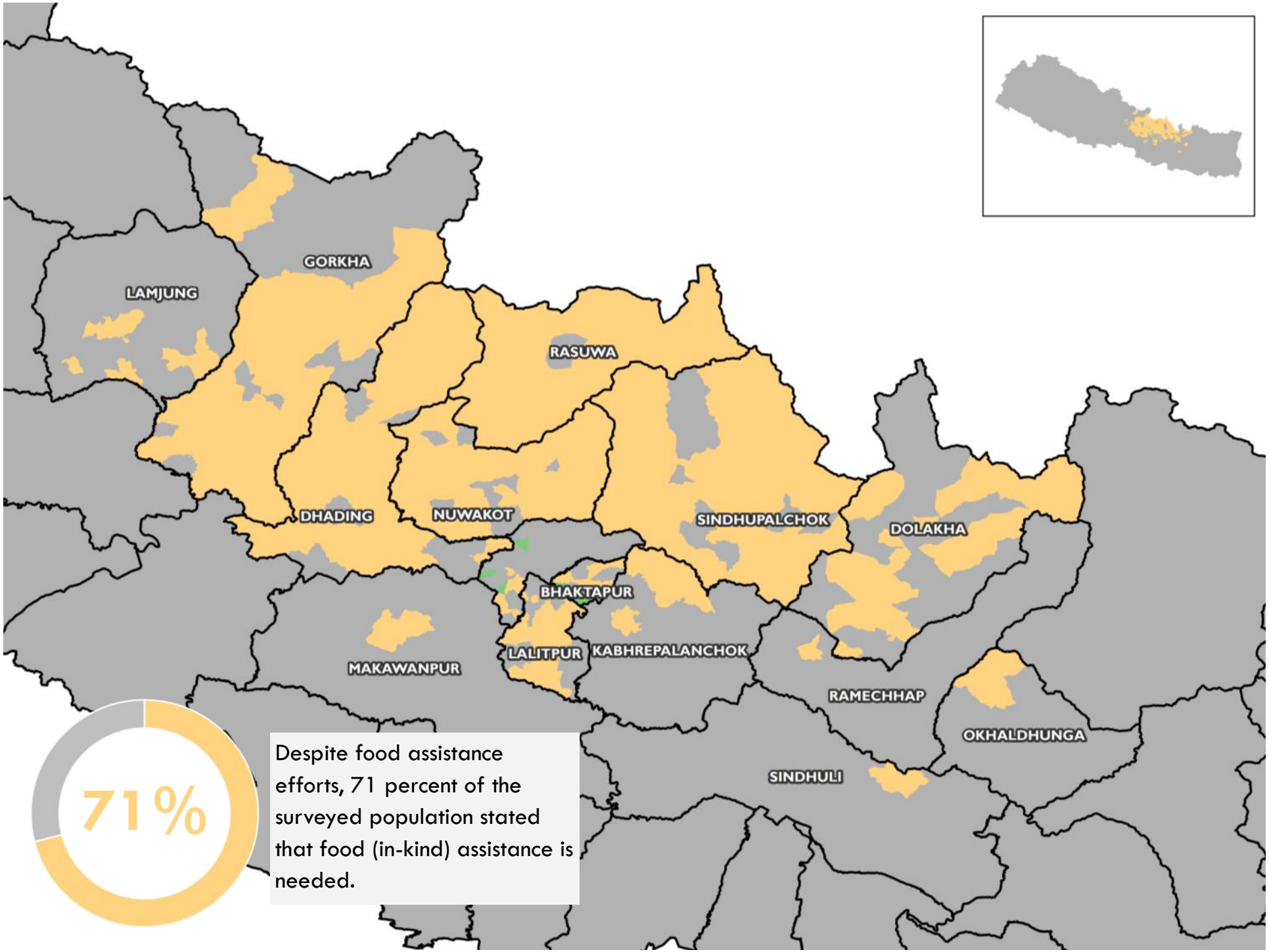
Food assistance is being delivered in three phases—transitioning from relief to targeted support, to reconstruction and rehabilitation of livelihoods. In each of these phases, the food security cluster will ensure that assistance is delivered and utilized in safe, accountable and dignified conditions.

PROBLEMS IN ACCESSING AID



% OF HOUSEHOLDS THAT RECEIVED AID, BY CASTE

Received	Brahmin/Chhetri	Janajati	Dalit
Food (in-kind)	*51%*	*38%*	*50%*
Cash	*13%*	*13%*	*10%*
Shelter	*54%*	*43%*	*59%*


GORKHA
LAMJUNG
RASUWA
DHADING
NUWAKOT
SINDHUPALCHOK
DOLAKHA
BHAKTAPUR
LALITPUR
KABHREPALANCHOK
MAKAWANPUR
RAMECHHAP
OKHALDHUNGA
SINDHULI
71%
Despite food assistance efforts, 71 percent of the surveyed population stated that food (in-kind) assistance is needed.

REMITTANCES

An influx of remittances has provided support in the initial weeks following the disaster. Remittance flows to the most affected rural areas, however, have been limited.

There has been much discussion on the role of remittances in supporting both immediate relief and longer-term reconstruction efforts. While overall remittance flows have certainly increased since the earthquake, their exact role in supporting assistance efforts is not yet clear. The flow into rural areas, in particular, may have been overemphasized.

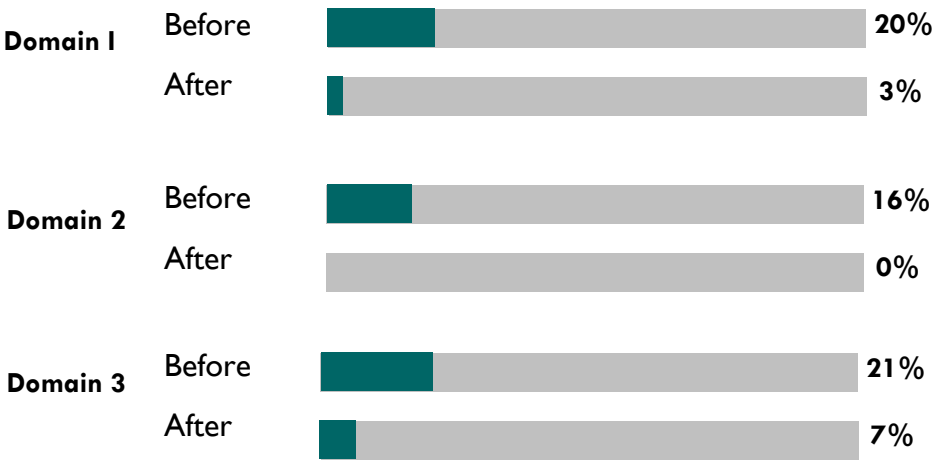
It is difficult to determine how much money has been transferred as actual "remittances" (i.e. from family member to family member), relative to what has been transferred as donations to groups or individuals providing relief.

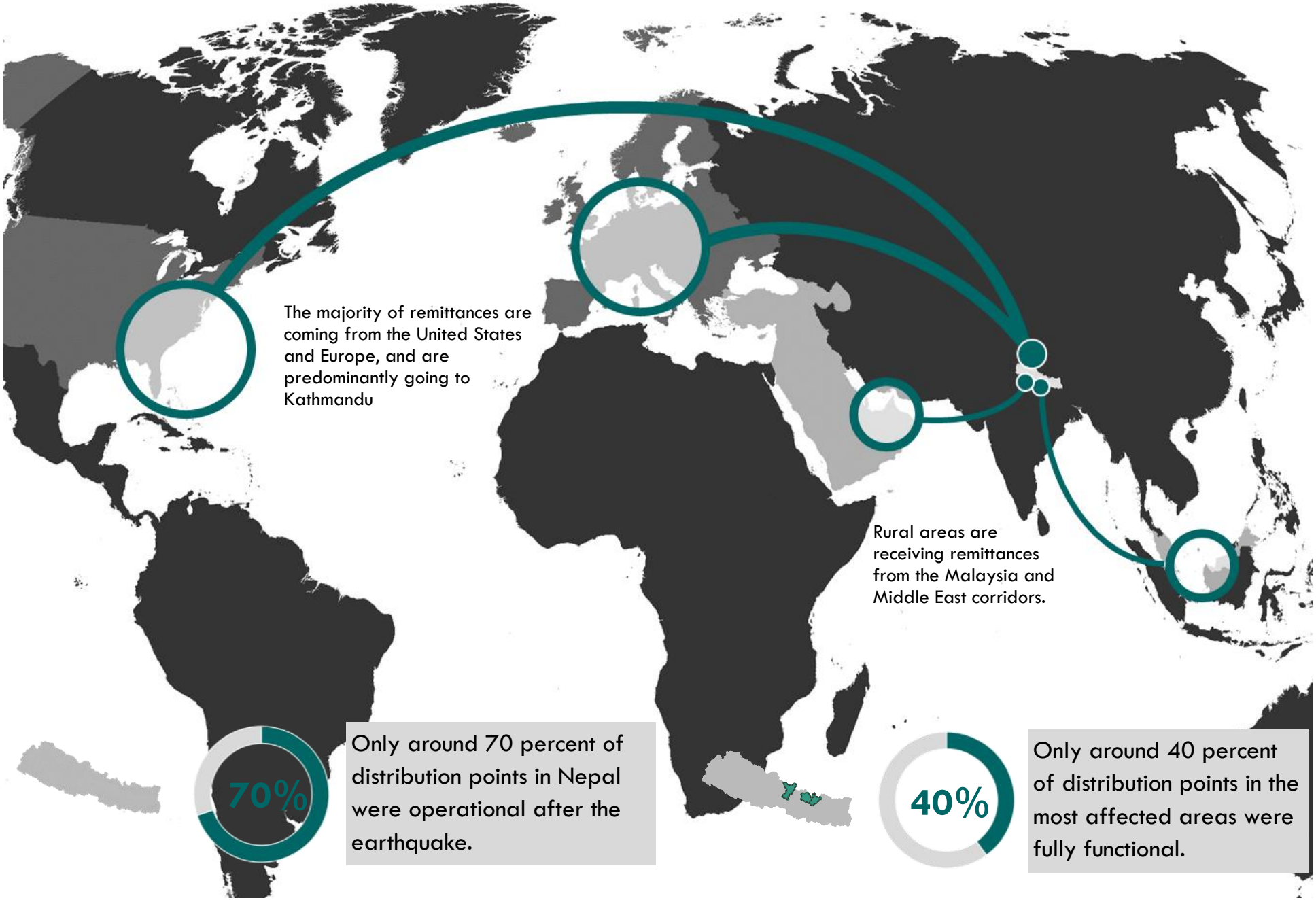
Transfer transactions shot up immediately following the earthquake. Western Union– which waived their transfer fees in May– typically handle 50,000 separate transactions over one month. In the month following the earthquake, this surged to an estimated 100,000-plus transactions.

The bulk of transfers, in terms of both number and value, came mostly from Europe and the US. The vast majority of these were collected in Kathmandu, and appears to have come from relatively well-off Nepalese and foreigners, who sent money to relief groups, friends or family members. Thus, while most funds were collected in Kathmandu, hundreds of thousands of dollars (likely millions) were used to buy supplies to support people outside of Kathmandu Valley.

Transfers into rural areas also increased – mostly from Malaysia and the Middle East— but only slightly, reflecting the fact that poorer migrants have less to send. Amounts as low as US$5 -10 were commonly being transferred immediately after the shock in the worst affected districts of Sindhupalchok, Gorkha, Dolakha and Rasuwa.

% OF HOUSEHOLDS THAT RECEIVED REMITTANCES, BEFORE AND AFTER THE EARTHQUAKE




The majority of remittances are coming from the United States and Europe, and are predominantly going to Kathmandu
Rural areas are receiving remittances from the Malaysia and Middle East corridors.
70%
Only around 70 percent of distribution points in Nepal were operational after the earthquake.
40%
Only around 40 percent of distribution points in the most affected areas were fully functional.

ANNEX I: STATISTICAL PROFILE

		Food Security Profile (% of Households)	Food Consumption				Vulnerability				Need for food assistance	
			1			2	3	4		5	6	7
			Food Consumption Score (FCS)			Poor Dietary Diversity	Coping strategy index			Market access	Based on analysis (Poor FCS or reduced meals or limited portions at least once in past week)	Based on field monitors observation
			Poor	Borderline	Acceptable	(< 4 food groups out of 7 **excludes 'sugar/honey')	Could not recover food stocks	Low coping (1-17)	High coping (>17)	(food items available AND less than 2 hrs away)		
Geographically	1	All affected districts	19%	27%	54%	19%	38%	53%	14%	45%	46%	77%
	2	Phase 1- Minimally food insecure (minimal)	14%	24%	62%	8%	8%	27%	5%	81%	27%	45%
	3	Phase 2 - Moderately food insecure (stressed)	15%	28%	57%	16%	43%	59%	16%	61%	53%	88%
	4	Phase 3 - Highly food insecure (crisis)	23%	28%	48%	26%	54%	71%	15%	35%	47%	91%
	5	Phase 4 - Severely food insecure (emergency)	35%	31%	34%	46%	79%	57%	43%	0%	95%	100%
Household composition	6	Male headed households	18%	26%	55%	18%	39%	54%	14%	47%	46%	77%
	7	Female headed households	20%	33%	47%	24%	32%	47%	16%	37%	48%	76%
	8	Vulnerable household (PVWL, chronic ill or disabled member)	26%	28%	46%	21%	44%	60%	12%	42%	55%	79%
	9	Elderly headed household	22%	27%	51%	26%	38%	59%	22%	47%	64%	84%
Caste / ethnicity	10	Brahmin / Chhetri	10%	25%	65%	11%	41%	54%	10%	44%	36%	76%
	11	Dalit	31%	27%	42%	33%	48%	67%	13%	42%	55%	89%
	12	Janajati	22%	29%	50%	21%	35%	49%	17%	47%	50%	75%
Main economic activity	13	Crop farming	18%	26%	56%	18%	43%	55%	15%	50%	47%	78%
	14	Livestock raising	16%	28%	56%	16%	41%	53%	18%	52%	52%	83%
	15	Agricultural and other daily labour	31%	32%	37%	28%	49%	55%	25%	50%	65%	86%
	16	Salaried and skilled employment	15%	29%	56%	14%	39%	55%	13%	42%	45%	75%
	17	Wholesale and retail trading	15%	20%	64%	15%	40%	36%	16%	38%	34%	62%
	18	Remittances	15%	21%	64%	16%	38%	41%	21%	43%	44%	72%

ANNEX II: METHOD

SAMPLING

The household food security assessment was carried out between 8-20 May 2015.

The assessment is based on a two-step process:

1. Food security phase classification maps were produced in the 11 worst affected districts (Gorkha, Dhading, Rasuwa, Nuwakot, Sindhupalchok, Dolakha, Ramechhap, Kavre, Okhaldhunga, Sindhuli, and Makwanpur) to identify broad patterns of food security impact.
2. A household food security assessment was carried out in the 11 worst affected districts. The sample was stratified by district after which wards were drawn using probability proportional to population size. 10 households were randomly selected in each ward.

A total of 101 wards were sampled for the household questionnaire. In each ward, 10 randomly selected households were interviewed for a total of 1,010 households.

Data entry was done by tablets through the NeKSAP data information management system (e-WIN) software.

CARTOGRAPHY

Operational profile: Mapped based on a combination of seismic activity and elevation.

Unreachable areas: Mapped based on elevation.

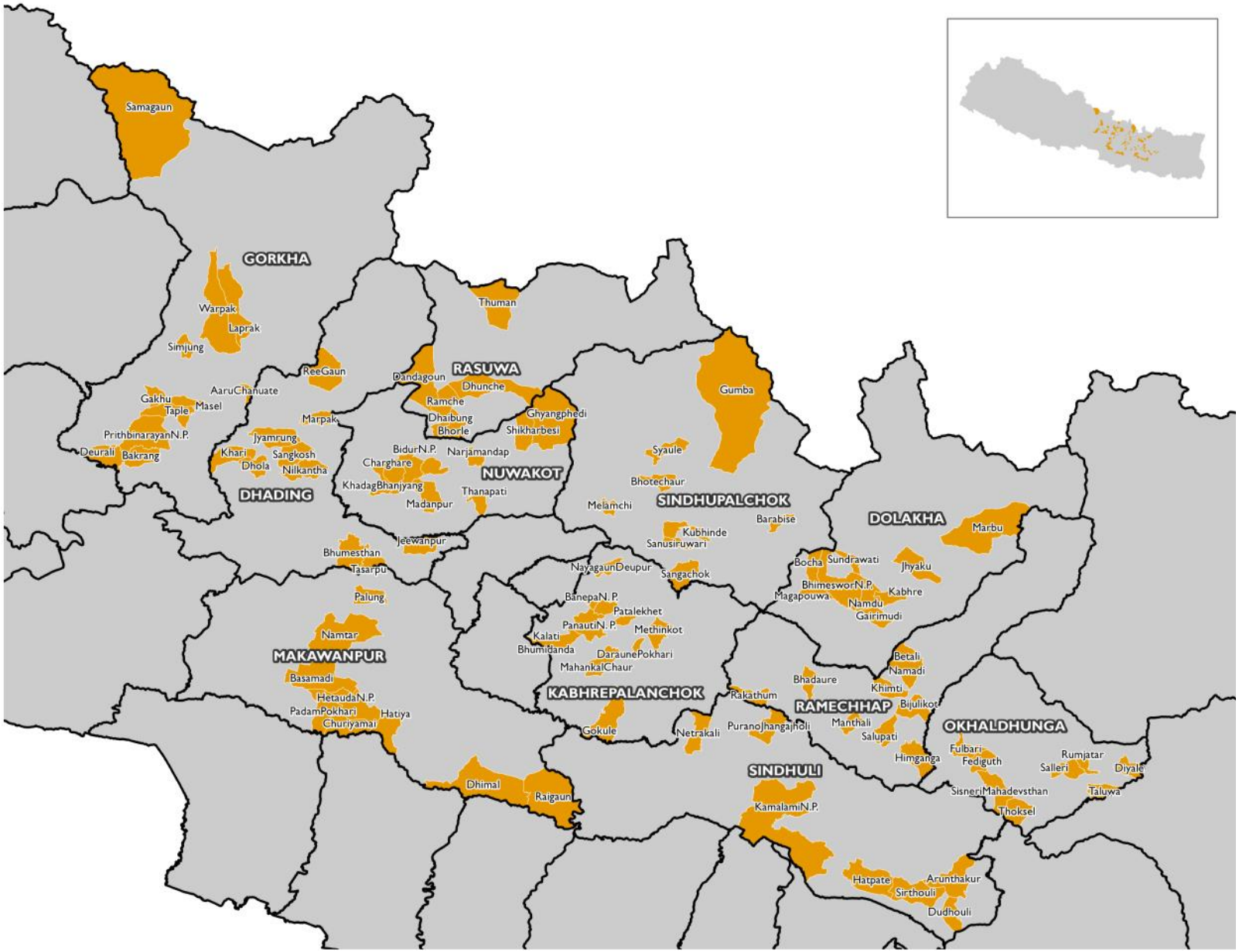
Food security (food security phase classification): Mapped at VDC level based on district food security network (DFSN) meetings.

Market functionality: Mapped based on data from trader surveys and key informant interviews. Key variables included in the map are: overall market functionality, traders' ability to meet increased demand, and price deviation from seasonal average. Household survey data on access and utilization to markets was also used to complement this.

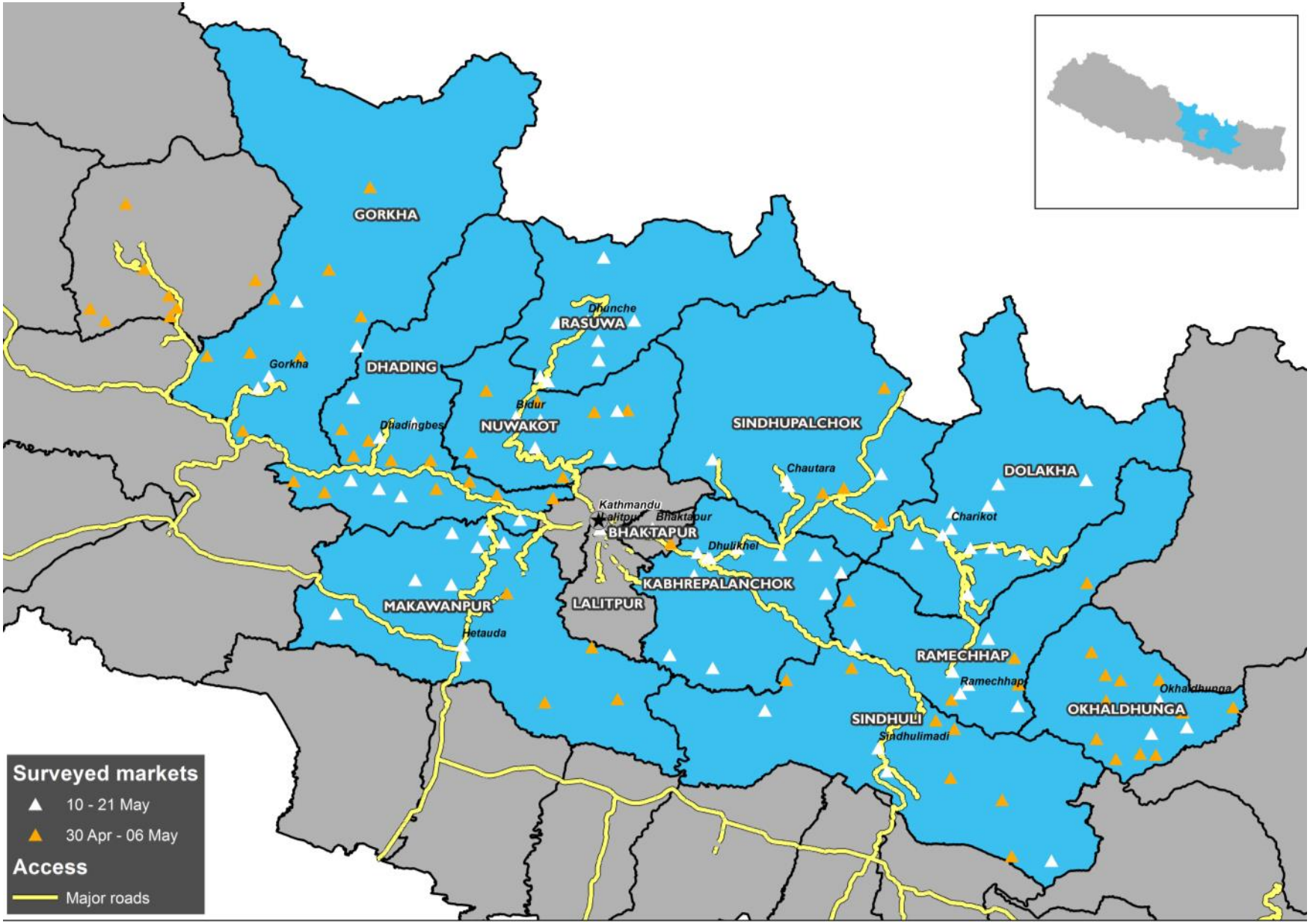
Population movements: Mapped based on location of settlements and data from FlowMinder (1 May 2015).

Assistance and remittances: Mapped based on data from the Food Security Cluster.

ANNEX III: SAMPLED AREAS



ANNEX IV: SAMPLED MARKETS



ANNEX V: QUESTIONNAIRE

NEPAL 2015 EARTHQUAKE | Questionnaire

Food Security Cluster

BI BASIC INFORMATION	
BI1 Interviewer information	
1. Name of interviewer	
2. Interviewer organization	
3. Date of interview	
BI2 Geographic information	
1. District	
2. VDC/municipality	
3. Ward number	
BI3 Household information	
1. Number of members that eat in the household	
2. Caste/ethnicity (1=Brahmin/Chatri, 2=Dalit, 3=janajati 4=others)	
BI4 Household composition (Tick all that apply)	
Headed by a single person	
Headed by a woman	
Headed by a child	
Headed by an elderly person	
With pregnant or lactating woman	
With disabled person(s)	
With chronically ill person(s)	

OI OBSERVATIONAL INFORMATION	
OI1 What is the current condition of the house? (Tick only one)	
Nothing standing	
Standing / heavily damaged	
Standing / Minor damage	
Standing / No damage	
OI2 Household currently lives in .....? (Tick only one)	
Own or rented house	
Temporary shelter	
Public building	
Host family / neighbour	
Open air	
OI3 Household need for food assistance? (Tick only one)	
No need for food assistance	
Food assistance required	
Immediate food assistance required	

MO MOVEMENT	
MO1 Do you plan to leave your village? (Tick only one. If yes, go to MO2. If no, go to FS1)	
Yes	
No	
MO2 If yes, where? (Tick only one)	
Another village (within same district)	
District headquarters	
Another district (except Kathmandu Valley)	
Kathmandu Valley	
Another country	

FS FOOD SECURITY

FS1 In the past seven days, how many days have you consumed? (Write a number between 0 and 7) **and what was the source?** (1. own-prod, 2. market purchase-cash, 3. market purchase-credit, 4. Food assistance, 5. Gift from friends/family, 6. Other)

	Consumed	Source
Cereals and tubers		
Pulses (dahl, beans, etc.)		
Meat, fish, poultry and eggs		
Dairy (curd, liquid milk, powder milk, etc.)		
Oil, fats		
Vegetables (including green leaves)		
Fruits		
Sugar, honey		

FS2 How much rice did your household eat in the whole day...? (in kg)	
Yesterday	kg
On a typical day before the earthquake	kg

LA LIVELIHOODS and INCOME

LA1	What were your main sources of income before the earthquake? (Tick all that apply)	How has your income been reduced by the earthquake? (1=not affected (<10%), 2= slightly affected (10-30%), 3= partially affected (30-50%), 4= severely affected (50-75%), 5= totally destroyed (>75%)
Crop production		
Livestock raising		
Agricultural daily labour		
Other daily labour		
Skilled labour		
Trade		
Tourism		
Remittances		
Other		

NEPAL 2015 EARTHQUAKE | Questionnaire

Food Security Cluster

LA2 Did you receive remittances? (Tick only one)	Before the earthquake?	After the earthquake?
Yes		
No		

LA3 How much money did you spend overall per week... (amount)	
... before the earthquake?	_____ NPR
... after the earthquake?	_____ NPR

LA4 How much money did you spend on foods per week... (amount)	
... before the earthquake?	_____ NPR
... after the earthquake?	_____ NPR

AL ASSET LOSSES

AL1 Was your food stock space (room/silo) affected by the earthquake? (Select one only)	
Completely destroyed (cannot recover food)	
Partially destroyed (can recover some food)	
Not affected (all food stocks are intact)	
AL2 Do you use irrigation infrastructure (Tick only one. If yes, go to AL3. If no, go to AL4)	
Yes	
No	
AL3 If yes, what has been the extent of the damage (Tick only one)	
None or limited (<25%)	
Some (25-50%)	
Substantial (50-75%)	
Severe (>75%)	
AL4 Has your ability to cook food been affected by the earthquake? (Tick only one. If yes, go to AL5. If no, go to AL6)	
Yes	
No	
AL5 If yes, what are the main issues? (Tick all that apply)	
Cooking utensils/pots/pans have been damaged/lost	
Stoves have been damaged and are unusable	
Access to cooking fuel is limited	

AL6 Did you suffer any crop losses? (1=no/few losses (<25%), 2= limited losses (25-50%), 3=substantial losses (50-75%) 4= total devastation (>75%), 5 = n/a)	Stored crop	Standing crop
Rice		
Maize		
Wheat		
Barley		
Potato		
Millet		

AL5 Did you suffer any seed losses? (1=no/few losses (<25%), 2= limited losses (25-50%), 3=substantial losses (50-75%) 4= total devastation (>75%), 5 = n/a)	
Rice	
Maize	
Wheat	
Barley	
Potato	
Millet	

AL6 Has the earthquake had a major effect on accessing forest resources? (Tick only one)	
Yes	
No	

AL7 How many animals do you own? (Write a number, 0=if no animals owned)	Before	Now
Cattle (including cows, yaks, buffalo)		
Oxen (for ploughing the field)		
Working equines (donkeys, mules, horses)		
Sheep and goats		
Pigs		
Poultry (chickens, duck)		

AL8 Have any of the following farming tools and/or equipment for livestock been lost or have they become unusable? (Tick all that apply)	
Plough	
Spade	
Sickle	
Doko/basket	
Tractor	
Livestock shelter (livestock equipment)	
Carts (livestock equipment)	
Water tanks (livestock equipment)	

CS COPING STRATEGIES

CS1 How many days in the past week has anyone in your household had to adopt the below coping mechanisms? (Write a number between 0 and 7; 0 if not used)	
Eating less-preferred foods	
Borrowing food/money from friends and relatives	
Limiting portions at mealtime	
Limiting adult intake for young children	
Reducing the number of meals per day	
Go to bed feeling hungry (anyone in the household, exclude fasting)	
Go a whole day without a meal (anyone in the household, exclude fasting)	

Food Security Cluster

MK MARKETS

MK1 Are the following items available in sufficient quantity in the market / shop you normally go to? (Tick all that are available)	
Cereals (rice, wheat)	
Lentils / pulses	
Vegetables	
Oil	
Seeds	
Agricultural tools	
Plastic sheeting	
Drugs for livestock	

MK2 How long does it take you during the rainy season to reach the nearest food market? ONE WAY.
Hrs

MK3 Do you have sufficient money to buy sufficient food for your family at present? (Tick only one)	
Yes	
No	

AI ASSISTANCE

AI1 What are your most important needs at present? (Do not read out options. Tick all that apply). What have you received? Tick all that apply).

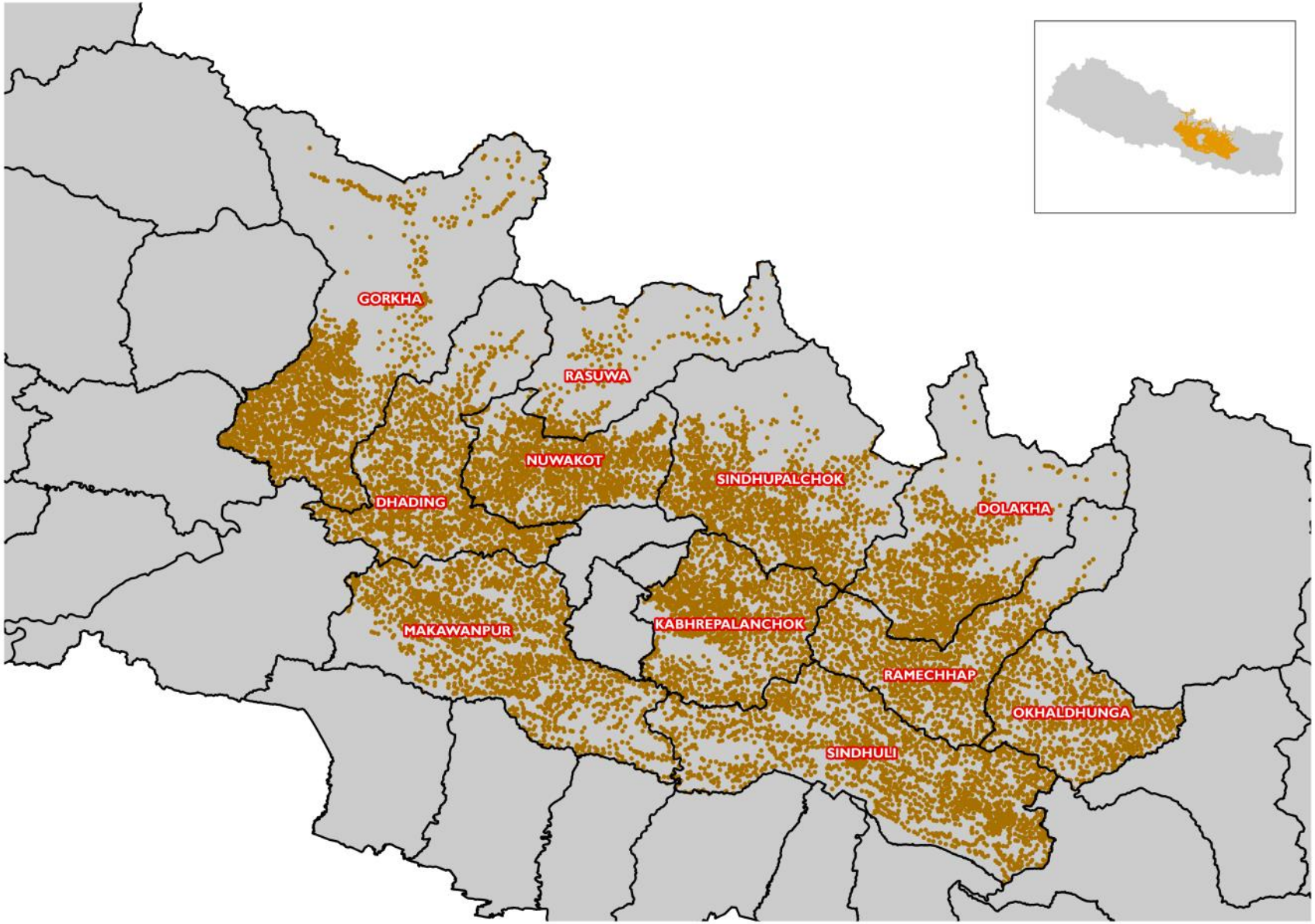
	Needs	Received
Food (in-kind) assistance		
Cash assistance		
WASH (water, latrines etc)		
Health and nutrition		
Shelter (housing construction material / tents/plastic sheeting)		
Education		
Non-food items (cooking utensils etc)		
Livelihood support (Agricultural input)		
Livelihoods support (Livestock needs)		
Livelihood support (Other)		
Protection		

AI2 Have you faced any of the following problems in receiving aid since the earthquake? (1=no problem at all, 2=minor problem, 3= moderate problem, 4= important problem)	
Lack of provision of aid	
Fear of accessing aid	
Denial of aid because of lack of documentation	
Denial of aid because of ethnicity or caste	
N/A - No aid needed	

CI CONTACT INFORMATION

CI1 Can we follow up with you on these question by phone? (Tick no or yes, and add phone if answer is yes)	
No	
Yes	
If yes, phone number	

ANNEX VI: SETTLEMENTS



ANNEX VII: ENUMERATORS

Chandra Ale
Proshan Rajbhandari
Narendra KC
Megh Bahadur Khatri
Yagya Pun
Rupak Gurung
Panna Man Maharjan
Neera Tamang
Mukund Thakur
Garima Adhikari
Krishna Majhi
Bijaya Gurung
Narendra G.C
Lokendra Gyawali
Madan Karki
Tanka Gurung
Nand Paneru
Prakash Tamang
Umesh Upadhyay
Dipak Tamang
Prakash Subedi
Lil Bahadur Gurung

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