

# NEPAL

## earthquake 2015

8 MAY 2015 | RELEASE 3

# KEY FINDINGS AND MAPS



नेपाल खाद्य सुरक्षा अनुगमन प्रणाली  
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Nepal Food Security Monitoring System



World Food Programme

Funded by the European Union



# INTRODUCTION

## PURPOSE OF THIS REPORT

This report describes the impact of the 2015 earthquake throughout Central and Western Nepal (excluding the three districts of Kathmandu Valley) and provides an analysis to guide initial relief efforts.

The report also provides maps and brief thematic analyses on:

- 1) Food stocks
- 2) Market functionality
- 3) Water sources
- 4) Sanitation
- 5) Health access

The report is designed to serve as a tool to enable stakeholder/expert discussion and derive a common understanding on the current situation.

This release is the final version of this report and will inform the second-phase household-level assessment, expected to occur in mid-May 2015.

## ACKNOWLEDGEMENTS

*Initial field verification to derive priority areas for humanitarian response was conducted using the Nepal Food Security Monitoring System (NeKSAP) field capacity.*

[NeKSAP](#) is the Nepal Government's (Ministry of Agricultural Development and National Planning Commission) food security monitoring system supported by WFP and funded by the European Union.



The views expressed in this publication do not necessarily reflect the views of the European Commission.

## UPDATES SINCE RELEASE 2

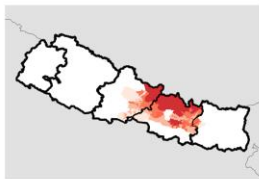
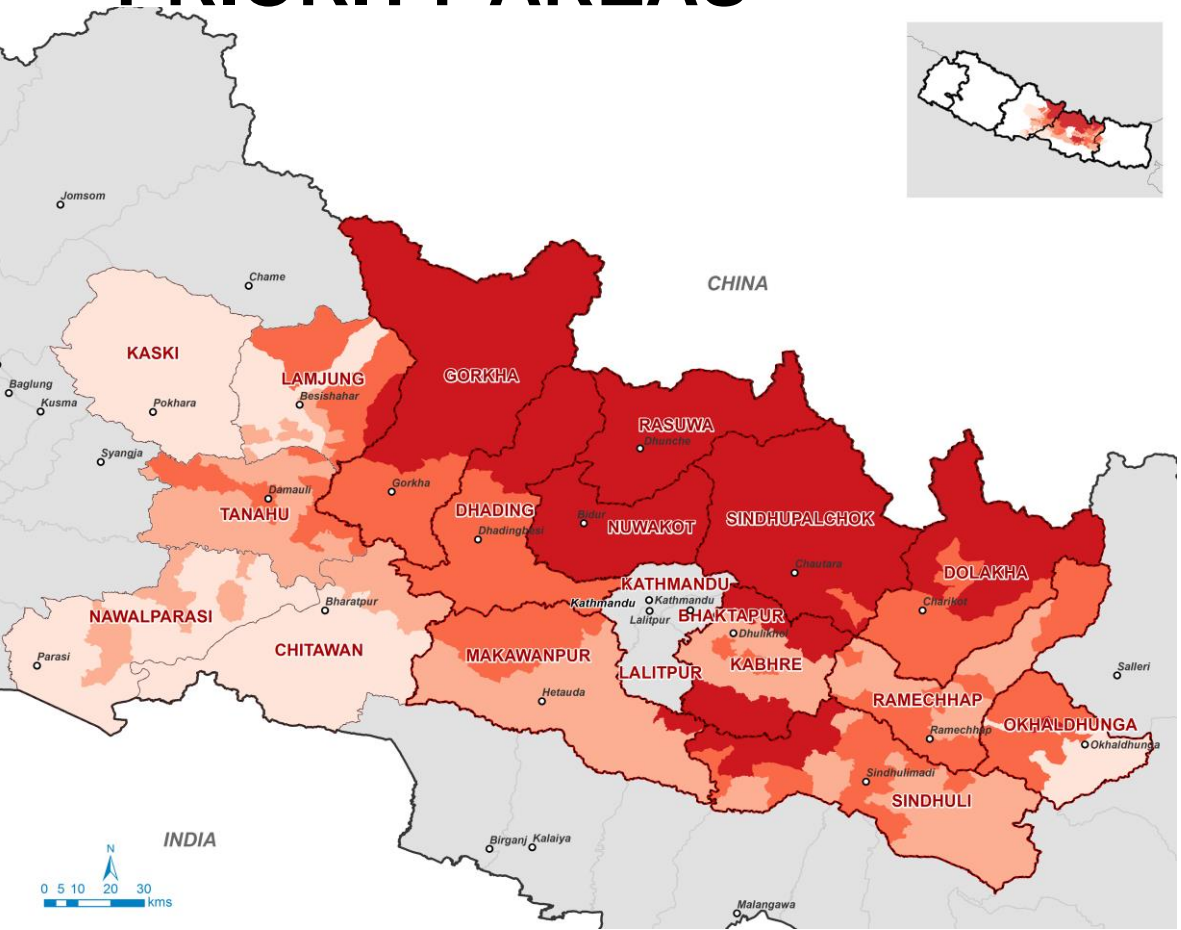
Prioritisation map and associated numbers have been updated based on the latest information available.

Field visits to six additional districts were conducted to determine the level of damage in surrounding areas. These include Sindhuli, Okhaldhunga, Chitawan, Tanahu, Kaski, and Nawalparasi.

The market functionality map has been updated based on information obtained from ongoing market assessments.

Estimates of food and livestock losses from MoAD have also been incorporated. A thematic map on transportation access has also been included.

# PRIORITY AREAS



## Food needs



*Loss of food stocks and closure of markets determine the urgency of food needs:*

- Food needs are extremely urgent due to widespread loss of food stocks. Income and livelihood opportunities are limited.
- Households have been able to better recover food stocks from damaged housing and market activity is likely to resume.
- Less widespread damage, better recovery of food stocks, and market activity is starting.
- Minimal or no damage

## Shelter damage



*In rural areas almost all houses are constructed of stone and mud. Brick is used in the Kathmandu Valley:*

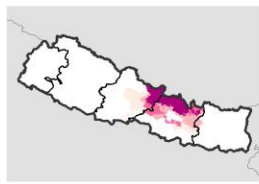
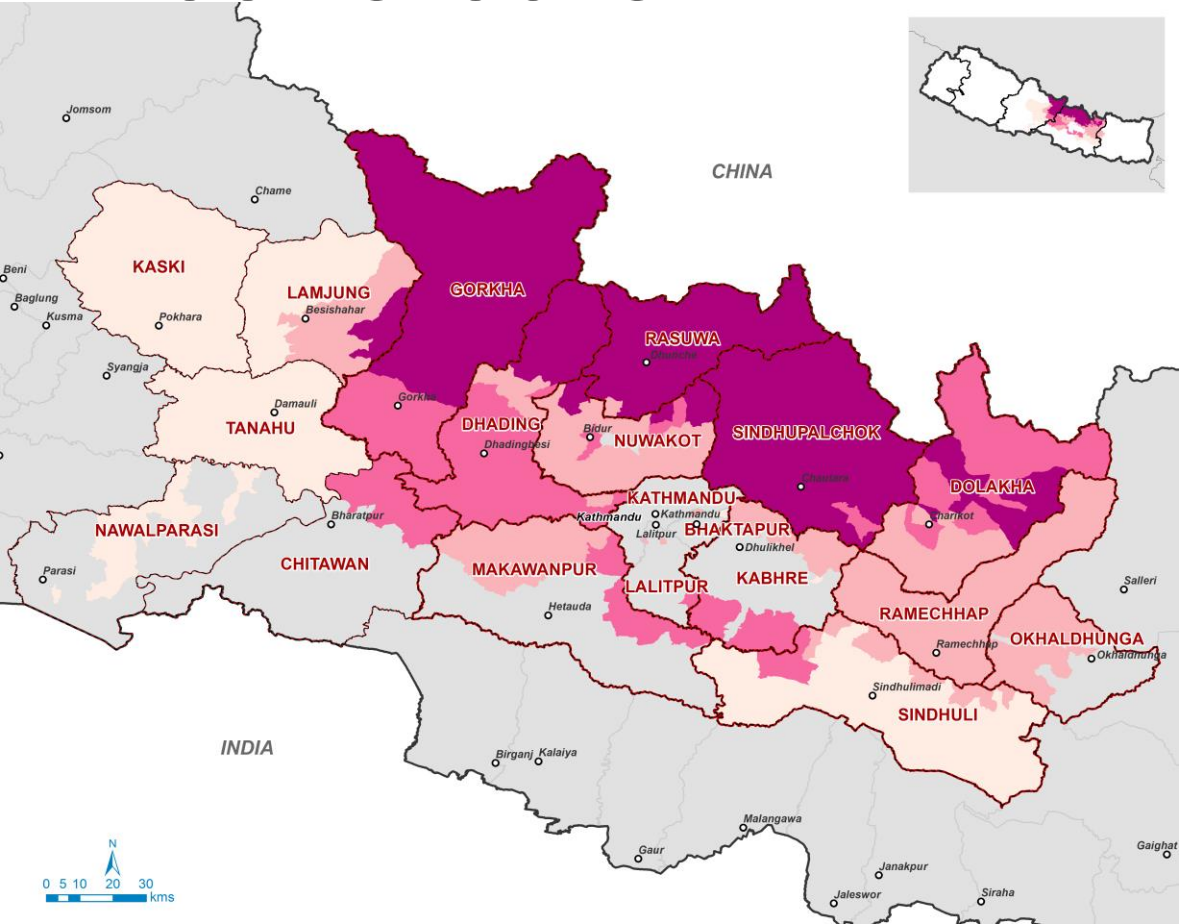
- More than 80 percent of houses were destroyed. Stone and mud houses are completely damaged in the mountain areas.
- 50 to 80 percent houses are damaged or destroyed, mostly affecting stone and mud houses.
- Less than 50 percent houses are damaged.
- Minimal or no damage.

## Population by priority area





# FOOD STOCKS



## Food stocks

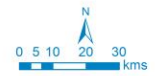


*Food stocks have been severely affected in most areas, especially in the mountainous areas near the epicentre of the earthquake.*

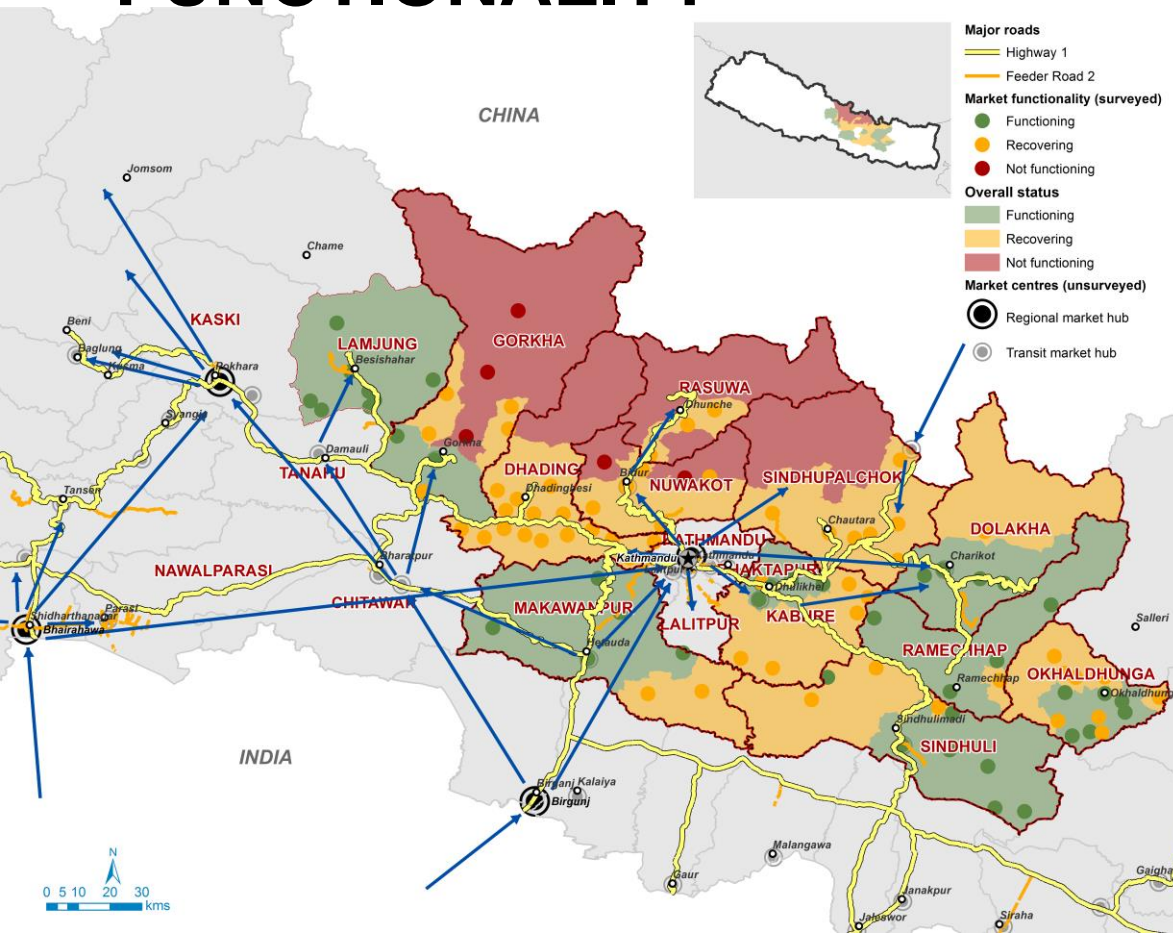
Food stocks, especially in the hill and mountain areas have been severely affected by the earthquake as houses - which are traditionally used to store food stocks - have been destroyed. Households rely on own production to meet their food requirements as market access is generally quite limited.

Supporting households restore their livelihoods during the next agricultural cycle will be essential.

- Food stocks completely destroyed.
- Food stocks severely affected.
- Food stocks partially affected.
- Food stocks unaffected.
- Limited or no data/Not assessed.



# MARKET FUNCTIONALITY



## Market disruption



*Despite being severely affected in many areas, markets are showing signs of quick recovery:*

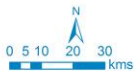
113 markets were assessed in 12 districts

Only 4 percent were reported as not functioning (shops damaged or destroyed, food stocks completely depleted or ruined, or shopkeepers and traders displaced or affected). This is a sharp decrease from the situation on 1 May, when 50 percent of surveyed markets were not functioning.

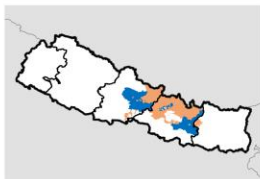
57 percent were reported as partially functioning. These markets are showing signs of recovery, but some shops are still closed due to fear of aftershocks, structural collapse, security, or depleted stocks.

39 percent were reported as functioning, with shops open and food stocks available. It should be noted, however, that even in functioning markets, high demand, price increases and unavailability of some commodities have been reported. More in-depth market analysis is therefore ongoing to determine the suitability of cash-based assistance, taking into account such factors.

**Markets are recovering in the affected districts. In most Mountain areas, market functionality - already limited before the earthquake - remains disrupted.**



# WATER SOURCES

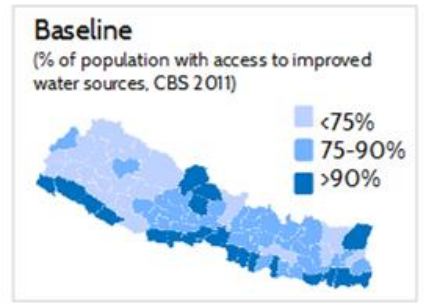


## Access to safe drinking water

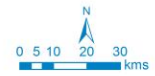


Access to drinking water has been severely disrupted. In some district headquarters, there is particularly limited water to sustain the population.

Water conditions in the affected areas were inadequate prior to the earthquake, with less than 90% of the population having access to improved water sources (pipes, tubewells, or handpumps). This situation has deteriorated as a result of the earthquake.

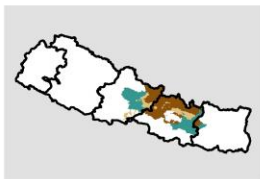


- No safe drinking water sources are available.
- Limited drinking water available.
- Drinking water sources largely uninterrupted.
- Limited or no data/Not assessed.





# SANITATION

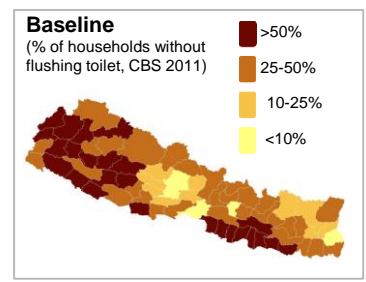


## Sanitation

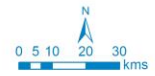


*The sanitation situation has significantly deteriorated, with most toilets not functioning.*

Precarious sanitation conditions (with between 25 and 50% of the population lacking flushing toilets during normal circumstances) have deteriorated as a result of the earthquake. Communities report a lack of functioning toilet facilities. Increasing practice of open defecation could increase the risk of contracting infectious diseases, which would in turn have detrimental effects on nutrition and health.

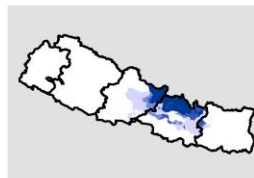


- No toilet facilities available.
- Limited toilet facilities.
- Most toilet facilities are unaffected.
- Limited or no data/Not assessed.





# HEALTH ACCESS

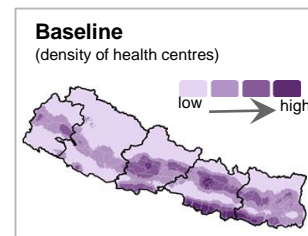


## Health services



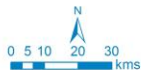
*Access to health services has been affected in several areas. There are serious concerns about congestion in hospitals.*

Several of the areas affected by the 2015 earthquake have limited access to health centres under normal circumstances. Destruction of critical infrastructure has exacerbated this problem. As a result, many injuries remained untreated in the initial days following the earthquake.



However, as electricity and medical supplies become available over the coming days, it is expected that the situation will improve significantly.

- Hospitals and other health services are mostly inaccessible. Injuries resulting from earthquake trauma are largely untreated.
- Hospitals and other health services are constrained. Some injuries resulting from earthquake trauma are untreated.
- Access to health services is difficult due to road blockages or lack of space.
- Minimal damage to hospitals and clinics.
- Limited or no data/Not assessed.





# METHOD



An initial remote 72 hour assessment was conducted by WFP on 25/26 April 2015. The assessment provided first estimates of the affected population requiring assistance based on published USGS shakemaps, population density and housing quality.



Capitalizing on the NeKSAP field capacity, 6 field teams were deployed from 27 to 30 April visiting 10 of the most affected districts outside of the Kathmandu Valley. Bhaktapur and Lalitpur were also assessed but results are not shown in this report as the focus of this assessment is on districts outside the Kathmandu Valley, as instructed by the Government of Nepal and the Food Security Cluster. A second round of rapid assessments was conducted in 6 additional districts from 3 to 7 May. Updates from other organizations until 7 May have also been incorporated in the report.



The aim was to verify and update the findings from the 72 hour assessment through direct observation (where possible) and district-level stakeholder consultation, and categorize the severity of the earthquake's impact across Nepal at the VDC level. The assessment captured key information covering the following sectors: displacement and housing; infrastructure and services; WASH; health; and food security, using a short and simple [observation checklist](#). Population in need is calculated by taking the entire population (2015 projected estimates from 2011 Census) living in the priority areas.



In addition to the observation checklist, information obtained via members of the Nepali population submitting via the BBC media (see Annex 1) and data from the Ministry of Agricultural Development were also included. In addition, a thematic map on transportation access has been developed based on the latest information from the Logistics Cluster.



The findings of this report will be used to inform the design of a second-phase in-depth assessment at household level for the food security cluster.

# ANNEX I: USE OF SOCIAL MEDIA



## Validation



Information gathered from social media outlets was used to validate the findings of the rapid assessment.

Members of the public were asked to rank damage to housing and property on a scale of 1-4 with 1 being the most impacted (all buildings destroyed) for respective VDCs. Over 300 responses were recorded between 26 April and 3 May through the BBC Nepali Service.

The most common response by district is also shown.

The results of this survey have been used to corroborate the findings of the rapid assessment.

# ANNEX II: AGRICULTURAL LOSSES\*



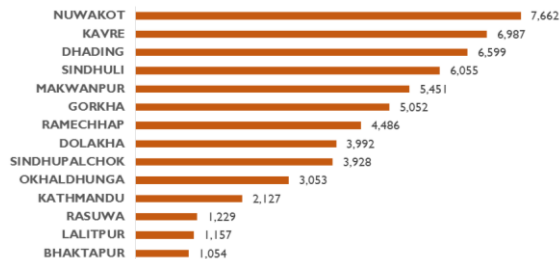
नेपाल खाद्य सुरक्षा अनुगमन प्रणाली  
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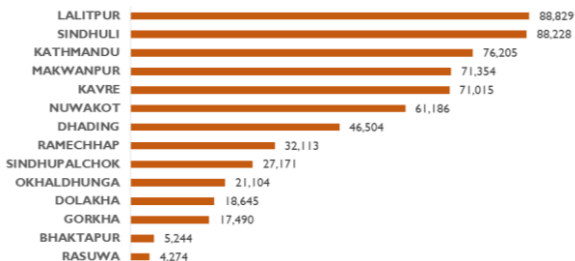
World Food Programme



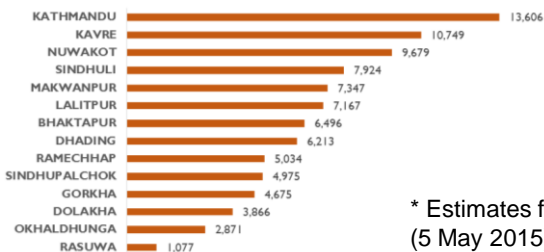
Livestock losses  
(numbers)



Poultry losses  
(numbers)



Food stock losses (MT)



\* Estimates from MOAD  
(5 May 2015)



## Agricultural losses

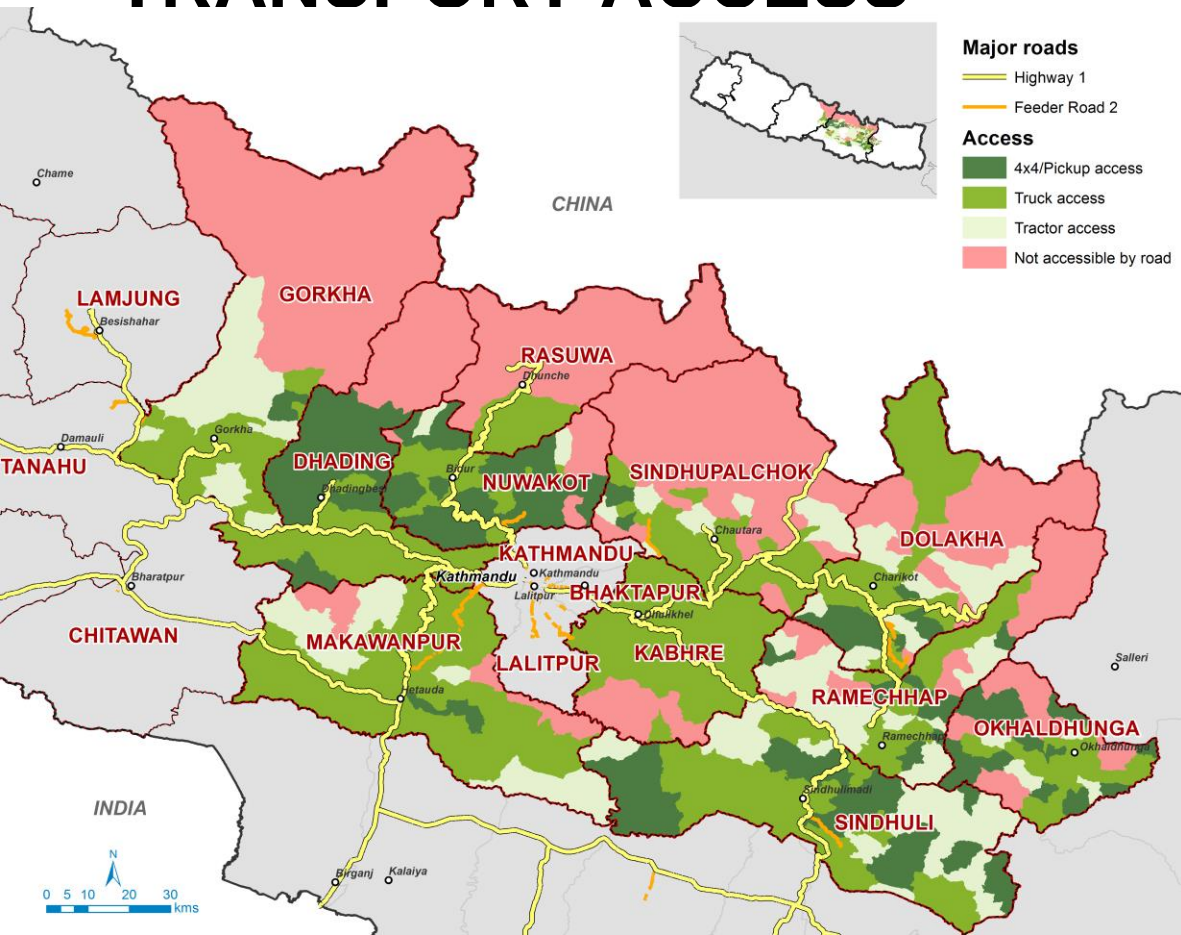
*Official data from the Ministry of Agricultural Development suggests that agricultural losses have been significant.*

The majority of Nepalese households rely on income from farming activities as their primary livelihood. Agricultural losses therefore have a significant impact on the rural population in the affected districts.

Livestock constitutes an integral part of the Nepalese agriculture system. A majority of agricultural households keep livestock. Roughly half of all agricultural households keep cattle, 38 percent of households have at least one buffalo, 52 percent have goat or sheep, 44 percent have poultry, and 10 percent have pigs. Given the significance of livestock, loss of livestock and poultry can have detrimental impacts on food security (NPC, WFP, World Bank, AusAid, UNICEF, 2013 – Thematic Report on Food Security and Nutrition 2013).



# ANNEX III: TRANSPORT ACCESS



- Major roads**
- Highway 1
  - Feeder Road 2
- Access**
- 4x4/Pickup access
  - Truck access
  - Tractor access
  - Not accessible by road

## Transport Access



*Transport access has improved significantly but more remote, mountainous areas remain inaccessible by road.*

In general road access is not a concern, although landslides have blocked transportation in some areas, including Rasuwa district headquarters.

However, many affected areas are remote without road access even in normal circumstances. These areas are, at present, mostly reachable by helicopter.

