

WESTERN NEPAL EARTHQUAKE

Joint Market Assessment Report #1



Type(s) of shock:	Western Nepal Earthquake
Date(s) of shock(s):	November 3, 2023
Date(s) of shock(s):	November 09 - 29, 2023
Market assessment led by	Cash Coordination Group
Market assessment supported by	UNICEF, Save the Children, World Vision, Dan-Churchaid, Mercy Corps and Aria Technologies.
Affected population within affected area: <i>(Number of households and people)</i>	250,000 (62,000 Households)
Average household size: <i>(Source of information)</i>	4-5 persons

AREAS COVERED		
Jajarkot Market	Urban Municipality Nalgadh, Bheri	Rural Municipality Kuse
Rukum West Market	Urban Municipality	Rural Municipality Sanibheri
Reference Market	Birendranagar, Nepalgunj	
Number of traders (wholesalers and retailers) and market representatives included in assessment:	40 Vendors/Merchants and 750 Household Respondents	
Household survey	Urban Municipality Chaurjhari, Aathbiskot, Bheri, Nalgadh	Rural Municipality Barekot

ABSTRACT

The joint effort for post-earthquake market assessment was led by the Cash Coordination Group (CCG) and partnered by UNICEF, Save the Children, World Vision, Dan-Churchaid, Mercy Corps and Aria Technologies.

KEY HIGHLIGHTS



The earthquake affected population faces immense hardships due to inadequate shelter, water scarcity, and essential supplies, exacerbated by the impending harsh winter. The top needs of the affected population reported to be transitional shelter, winterization kits, food commodities, kitchen utensils, health, sanitation and hygiene items and special needs for Pregnant and Lactating Women (PLW), People with Disability (PWD), children and aged group among others.



There are no major damages recorded to the market infrastructure. Markets are fully operational as in the pre-earthquake situation. Merchants did not receive any significant physical shock to their shops and/or warehouses.



The road connectivity to the local communities is functioning and the transport services are smooth. According to the survey results, the majority of the respondents reported having access to the local market within half an hour of walking distance, while a small minority reported to walk for long hours.



There was a hike in the demand of basic food commodities such as rice, wheat flour, and edible oils immediately after the earthquake. However, those demands swiftly went down as the rapid assistance of food and non-food commodities was distributed by government and humanitarian agencies.



The supply chain in the local market of Jajarkot and Rukum as well as in the reference of Surkhet and Nepalgunj remain unchanged. Merchants reported to have sufficient essential commodities to meet up the demand. They also reported to be able to scale up supply should the demand increase.



There were slight price fluctuations recorded between Nov. 9 and 28, 2023, with no significant change. Similarly, the prices in local markets of Jajarkot, Rukum West and Surkhet of food commodities have not had much changes as compared to normal situation except for a few seasonal perishable vegetables.



A large number of the affected households surveyed reported having bank accounts. Those who did not have a bank account reported to get one within 3-4 days.



A majority of the respondents during the Focus Group Discussion (FGD) with approximately 80-90 % reported to have mobile phones, of whom approximately 60 % use the internet facilities.

METHODOLOGY

In the aftermath of Western Earthquake, the CCG immediately called for joint market assessment to be able to assess the feasibility of market-based intervention. To understand local market situation in relation to the availability of essential goods and services, commodity prices, access of the affected household to the local market, access to banks and presence of financial service providers (FSPs), the market assessment was carried out by the CCG's member agencies in primary local market of Jajarkot and Rukum West districts as well as reference market of Surkhet and Nepalgunj for wholesale and restocking.

The report also explores digital-financial access to assess the feasibility of digital cash and value vouchers. It assesses the feasibility of implementing CVA, especially Multi-purpose Cash Assistance (MPCA), to support families impacted by the recent earthquake. A mixed modality of in person market survey, vendors interviews, Focus Group Discussion (FGD) and telephonic survey with affected households was applied. The method adopted for the market assessment was judgmental non-probability random sampling.

1. Situation Overview

On November 3, a 6.4 magnitude earthquake struck the Karnali province in Western Nepal with its epicenter in Jajarkot District, claiming the lives of 154* individuals. The three tier governments are actively managing the humanitarian response with significant involvement of humanitarian agencies and civil society. More than 382 aftershocks were reported forcing people to spend nights in the open or makeshift shelters in freezing overnight temperatures. According to the National Emergency Operations Center (NEOC), 62,000 homes were affected (35,455

partially damaged, 26,557 completely damaged) by the earthquake. Around 898 school buildings (294 fully damaged, and 604 partially damaged) in both districts suffered damage due to the earthquake and require immediate reconstruction for the continuation of educational services. Several school buildings in Darma Rural municipality in neighboring Salyan district were also damaged. The earthquake also caused damage to public institutions, including 54 police offices in the province as well as the District Administration Office (DAO) in Jajarkot, forcing both to continue working from makeshift buildings.

Damages details – Rukum West

Municipality	Fully Household Damage	Partially Household damage
Kuse Rural Municipality	1504	3098
Chhedagad Municipality	1945	4545
Junechade Rural Municipality	634	3344
Nalgadh Municipality	2108	4428
Barekot Rural Municipality	1035	2286
Bheri Municipality	2530	4238
Shivalaya Rural Municipality	38	2768

Damaged details – Jajarkot

Municipality	Fully Household Damage	Partially Household damage
Aathbiskot Municipality	7184	0
Sanibheri Rural Municipality	3146	722
Chaurjhari Rural Municipality	1987	4374
Triveni Rural Municipality	1935	1258
Musikot Municipality	2300	3500
Banphikot Rural Municipality	18	107

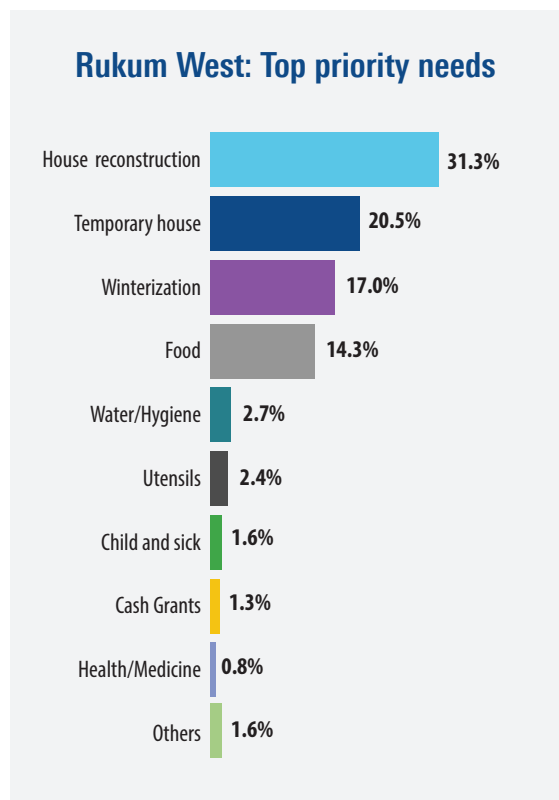
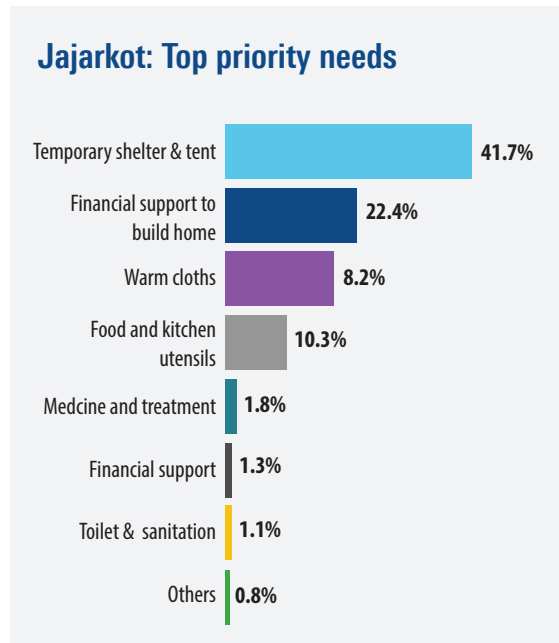
With the completion of the initial lifesaving phase of the response, concerns remain over the living conditions of the most affected families over the coming winter months. The shelter support provided, primary tarpaulins and some cloth tents, is inadequate for the freezing temperatures and for longer term use, hence the Government's focus on transitional shelter capable of providing some warmth over the winter months. Despite the Government's pledge to support affected families with NPR 50,000 for reconstruction, how soon those transfers will take place remains uncertain. With the earthquake exacerbating the living conditions of already vulnerable households, there is an urgency in providing assistance which not only boosts long-term living conditions but strengthens resilience.

Following the earthquake, the Government activated clusters and planned a response both in-kind and in cash across various clusters. The joint meeting of the Early Recovery Cluster and Community Based Disaster Management (CBDRM) Platform, chaired by the Ministry of Federal Affairs and General Administration (MoFAGA) on 6th November, provided approval for the use of Cash to cover basic needs of affected households for a month. The meeting suggested coordinating this initiative with the District Disaster Management Committee (DDMC) and distributing it under the leadership of the respective Local Disaster Management Committees (LDMC).

2. Need and Priorities

The earthquake affected population faces immense hardships due to inadequate shelter, water scarcity, and essential supplies, exacerbated by the impending harsh winter. Vulnerabilities increase for children, seniors, marginalized women, pregnant/lactating women, the elderly, and persons with disabilities including earthquake-induced disabilities. Multiplying challenges in food, nutrition, healthcare,

and rising malnutrition among children compounded the crisis. The top needs of the affected population reported to be transitional shelter, winterization kits, food commodities, kitchen utensils, health, sanitation and hygiene items and special needs for PLW, child and aged group among others:

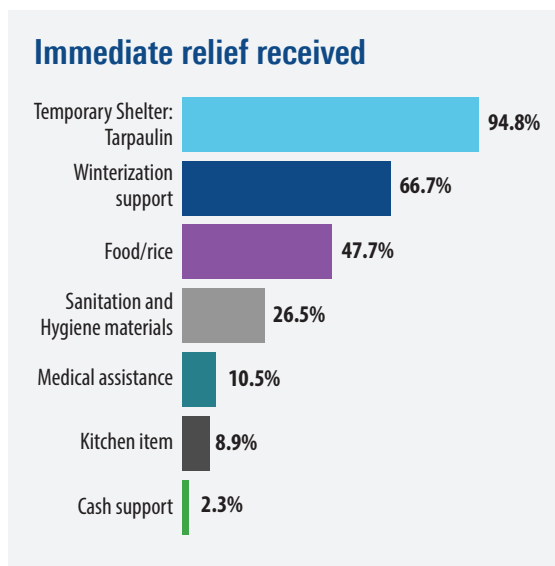


Source: Household survey from Jajarkot and Rukum West



While local, provincial, and federal governments swiftly collaborated on response efforts, the engagement of humanitarian agencies remains crucial for preserving lives, easing suffering, maintaining dignity, and fostering resilient recovery. The District Disaster Management Committee (DDMC) secretariat oversees relief distribution with a one-door policy. Political leaders are actively gathering relief materials from diverse sources. Agencies must register relief items with the DDMC secretariat for approval before distribution, aligning with the priorities of local government. The respondents reported to have received the following assistance:

The joint meeting of the Early Recovery Cluster and Community Based Disaster Management (CBDRM) Platform, chaired by the Ministry of Federal Affairs and General Administration (MoFAGA) on 6th November, provided approval for the use of Cash to cover food needs of affected households for a month. The meeting suggested coordinating this initiative with the District Disaster Management Committee (DDMC) and distributing it under the leadership of the respective Local Disaster Management Committees (LDMC).



Source: Household survey from Jajarkot and Rukum West

3. Market Analysis

The market analysis is classified into six categories to have a better understanding of the market through commodity maps, impact of the earthquake, availability of core goods and services, fluctuation of prices, demand and supply variations and the changes in consumer/trader behaviors. These are important factors that affect the functionality of the market and behaviors of market actors and any changes in some of these factors can influence the market heavily. National and global economic dynamics, crises and disasters can also alter the usual market flow.

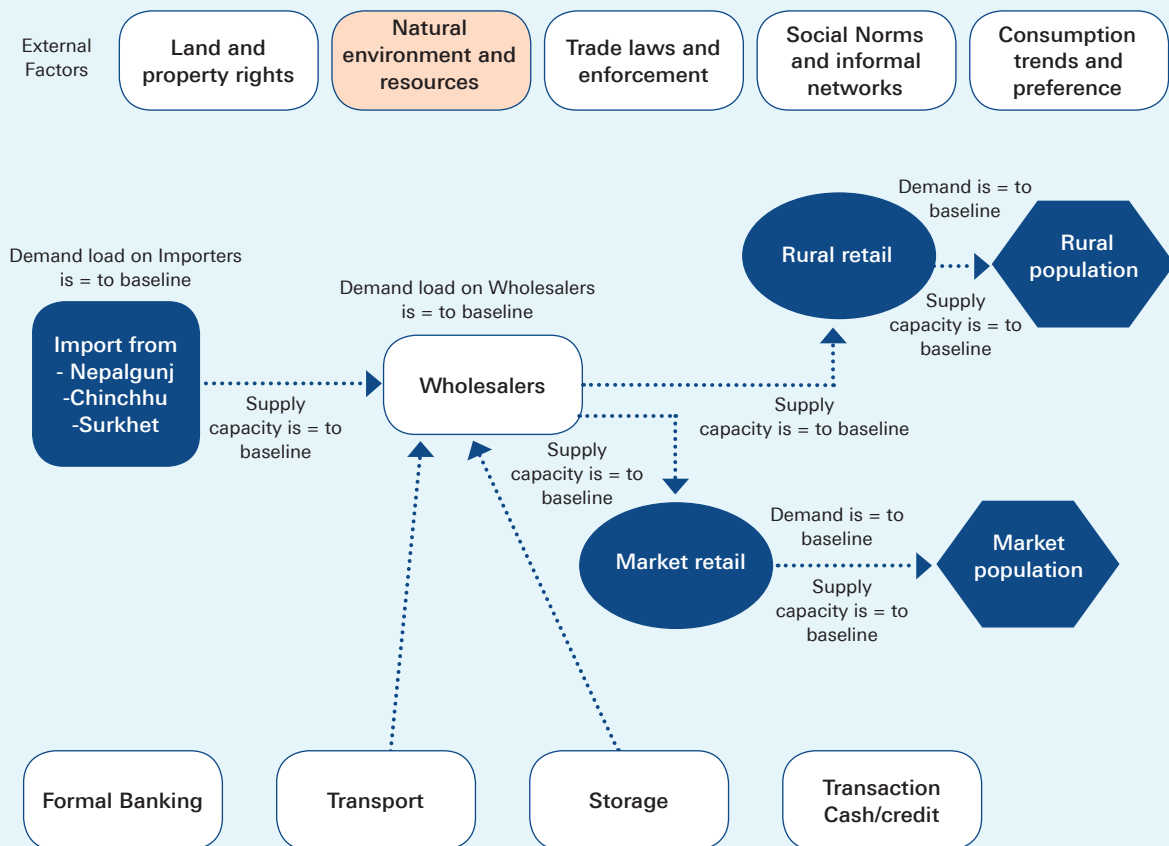
3.1 Market Maps

3.1.1 Road connectivity and food supply chain

The market mapping diagram serves as a crucial tool for assessing the aftermath of a disaster on the affected communities. In the context of earthquake-devastated households, the diagram illustrates the intricate connections between various market functions and infrastructure elements. Remarkably, despite the widespread destruction of the houses, the data gathered on the ground indicates that the essential market functions and infrastructural components have not been significantly impacted, yet the natural environment and resources (in red) have been damaged.

One food item (rice) and non-food item (soap) were taken on as a sample to demonstrate the supply chain. With a dependency on imports and minimal production of both rice and soap (In the affected areas, rice is farmed minimally and only as subsistence farming. Soap not produced), transport and storage facilities have not been hampered as to suggest the potential of continuing market utilization to capacity. It underscores the resilience of economic systems and the potential for leveraging existing market mechanisms through CVA and its various modalities to facilitate aid distribution and support the affected population.

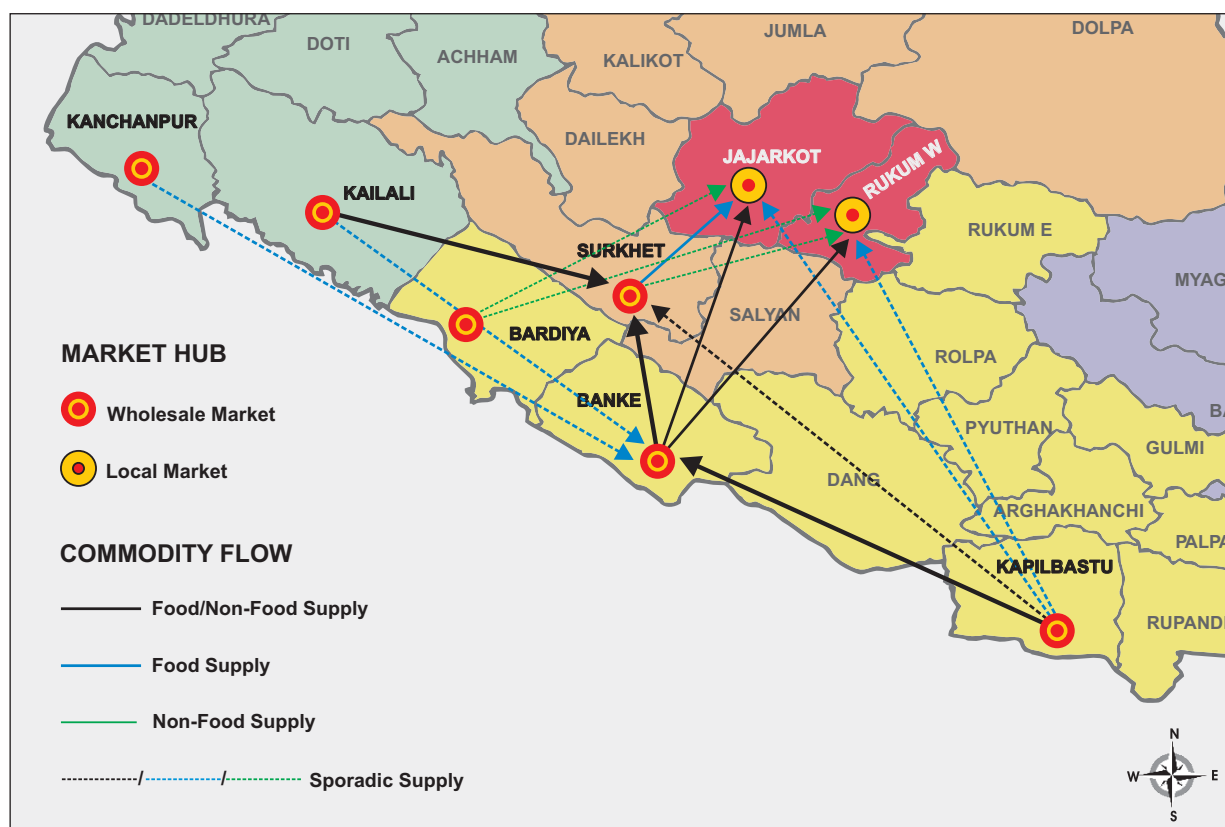
Jajarkot Rukum West Market Map (post shock)



3.1.2 Commodity flow map

The market flow map of the Karnali region post-earthquake outlines commodity movements from major import centers to earthquake-affected areas of Jajarkot and Rukum West (highlighted in red). It identifies key marketplaces crucial for distribution, emphasizing major markets' role in the supply chain network, represented by the thickness of the corresponding arrows

representing magnitude of flow of goods. The map includes a categorized graph distinguishing food (e.g., rice) and non-food items (e.g., soap, toothpaste) as well as location from where both goods are supplied. This technical tool will aid in visualizing and analyzing commodity dynamics, supporting informed decision-making for relief and recovery efforts in the earthquake-affected regions.



3.2 Impact of shocks

The earthquake has caused serious damages to lives and livelihoods of the affected population and fractured both personal and public buildings leaving them unlivable. Moreover, the affected communities in Jajarkot and Rukum West have heavily relied on farming, livestock, and poultry which sustained significant disruption caused by infrastructure collapses pushing the affected population to seek shelter in farm fields. Amidst the season of rice harvesting, the affected population who have already lost assets and are living under constant stress may

not be able to engage in harvesting which could decrease the harvest and affect the food supplies and inflation in the upcoming months.

As many as 62,000 families are displaced and need urgent transitional shelter support. The families, currently living in their farm fields, need rapid reconstruction of shelter. The government of Nepal has developed a “Transitional Shelter Cash Guideline” to provide NPR 50,000 cash support to the affected families in two tranches. Those families would need to procure the essential materials to build the shelter from the local market.



The affected families, along with the shelter and winterization support, also needs basic food support and supplemental nutritional needs for PLW and children. The government has significantly focused on cash support across various clusters. The early recovery cluster meeting led by MoFAGA made a ministerial-level decision to support the affected families with cash to cover their food needs. As previously instituted for the response of Bajhang earthquake, the government recommended a transfer value of NPR 15,000 (USD 113) for a family. This covers minimum basic needs for a month. Families, however, will need support for at least two additional months.

There were no major damages recorded to the market infrastructure. The road connectivity to the local communities, which was initially recorded to be obstructed immediately in the aftermath of the earthquake, is reported to be functioning and the transport services are smooth. The merchants did not receive any physical blow to their shops and warehouses. According to the survey results, the majority of the respondents reported having access to the local market within half an hour of walking distance. In contrast, a small minority reported to walk for long hours or with local bus drives.

Immediately after the earthquake, the merchants were initially unsure about the transportation conditions, especially road conditions enroute to the remote areas and the supplies in the wholesale market of Surkhet and Nepalgunj which was already suffering the hit of economic crises and inflation due to festivities. However, the business resumed soon after the earthquake

and the merchants started stocking up the essential supplies of food and non-food items.

3.3 Demand

There was a small hike in the demand for basic food commodities such as coarse rice, wheat flour, and edible oils immediately after the earthquake. Many families' food stocks would have been damaged under the rubble and sudden rise in the demand for such goods may have resulted in increased prices accordingly. However, those demands swiftly went down as the rapid assistance of food and non-food commodities, in large quantities, were distributed. The local merchants reported to face declining sales due to relief items such as tents and tarpaulin, blankets, sleeping bags and food commodities from government and humanitarian agencies being procured elsewhere and transported to the affected municipalities.

Going along in the recovery and reconstruction phase, a number of organizations are planning on cash support to the affected families. Along with cash for transitional shelter and MPC, there are also plans to provide cash or in-kind assistance for supplemental nutritional requirements and other sectoral cash. It will in turn increase the demands for shelter materials such as CGI (corrugated galvanized iron) sheets and cements, basic food and non-food commodities and nutritional support items for PLW and children. The CCG anticipates that the demand side, which

has faced a slight decline contributed by in-kind assistance and gradually normalized over the weeks, is likely to increase again in the coming weeks after CVA intervention. The sudden kick-start of cash distribution by many humanitarian agencies targeted to cover different food and nonfood needs will influx the local market. However, the vendors were reported to be confident in responding to increased demands and balancing the supply chain.

The assessment findings suggest that the demand for labour in earthquake-affected areas has largely remained the same. However, the demand for labour is expected to increase during the construction. The daily wage rates of unskilled labourers remained largely stable, however, there are differences in the daily wage rates by rural and urban areas.

3.4 Supply chain

The supply chain in the local market of Jajarkot and Rukum as well as in the reference market of Surkhet and Nepalgunj remained largely unchanged. Traders reported to have sufficient availability of essential food and non-food commodities to meet the demand. They also reported to have the capacity to scale

up the supply should the demand increase. However, certain perishable food items, if not correlated with demand, might be challenging to stock up. As families would receive cash assistance to build transitional shelters, the materials needed to construct temporary shelters such as CGI sheets and cements might have to meet the increased demands. Various merchants reported to establish a temporary stall for shelter materials and stocking up sufficient supplies of such items should the demand start increasing.

Of the 750 respondents from the household survey, 99.5 % reported being able to buy their needs in local markets. Along with the local market in the community, a majority of them also reported Khalanga and Kalimati from Jajarkot and Radhi and Chaurjahari in Rukum West as the nearest market to get all of their basic needs. The wholesale market to procure supplies for Jajarkot and Rukum West are from Chinchu and Birendranagar of Surkhet, Nepalgunj, Krishnanagar, Bhairawa and Dhangadi.

3.5 Price Analysis

The food commodity price observed nationally showed a marginal decline in October compared to September 2023.

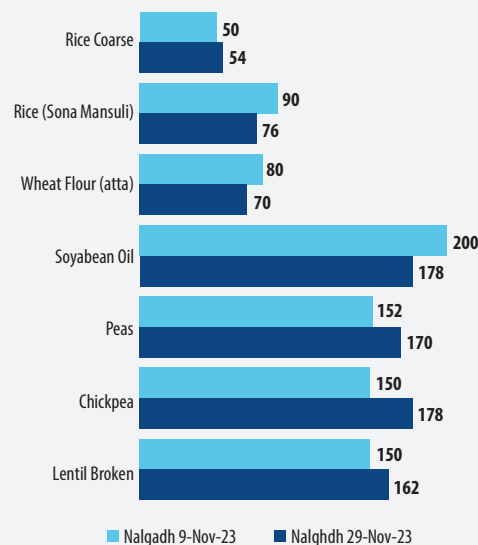


Similarly, the national price index cost of the food basket marginally declined in October compared to September 2023 and remained relatively high in the traditionally food insecure regions such as Karnali due to higher transportation costs and lower availability of food. In line with the observed changes in retail prices nationally, the cost of the food basket (consisting of rice, pulses, oil, eggs, and vegetables) in Karnali Province remained high at NPR 104.0 per person per day¹.

The price comparison between Nov. 9 and 28, 2023 in Nalgadh municipality of Jajarkot district, indicated a marginal fluctuation but no significant increase was recorded. For example, the price of course rice on Nov. 9 in Nalgadh market was NPR 50 per Kg, while it was NPR 54 per Kg on November 29. Similarly, the price of Sona Mansuli (rice medium quality) was NPR 90 on Nov. 9 immediately after the earthquake, while on Nov. 29 it fell to the normal price of NPR 76/ KG. This signifies that the markets which might have received a hit from the earthquake are gradually normalizing after a few weeks. Moreover, the falling trends could also be an indication of low demand because of in-kind assistance provided to the families by government and non-government humanitarian agencies.

1 Nepal mVAM Market Monitor Report – October 2023

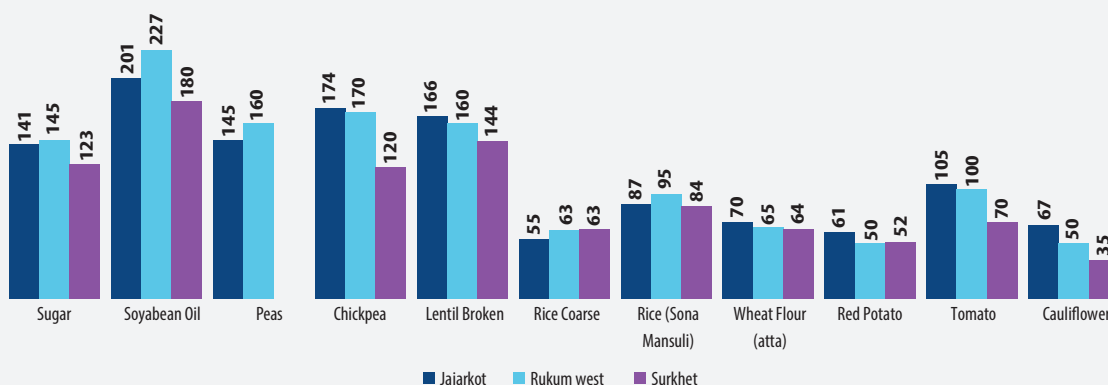
Price trend of key food commodities between 9 and 29 November 2023 in Nalgadh, Jajarkot



Source: Merchant interviews from Nalgadh Municipality in Jajarkot

Similarly, based on traders' reports in the local markets of Jajarkot, Rukum West and Surkhet, food prices are in a normal situation and no significant increase was recorded except for a few seasonal perishable vegetables such as tomatoes. There are also low margins of average prices of key food commodities between the wholesale in Birendranagar, Surkhet and the retail market of Jajarkot and Rukum West. For example, the average price of wheat flour is NPR 64/Kg in the wholesale

Average prices of key food items in three districts



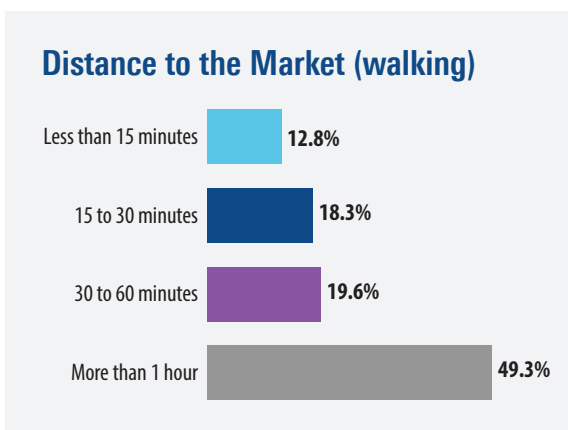
Source: Merchant interviews from Jajarkot, Rukum West and Surkhet



market of Surkhet, while in Rukum and Jajarkot the average price is NPR 65 and 70/Kg respectively. This indicates that the higher price is additional transportation costs from the wholesale to the retail market.

3.6 Market Access

A vast majority of the respondents, approximately 99.5% have reported to be able to buy their basic needs in their local markets. Although affected households reported to have access to the market, the distance to reach could be varied based on the remoteness and topography. The below chart demonstrates the market reach based on walking time:



Source: Household survey from Jajarkot and Rukum West

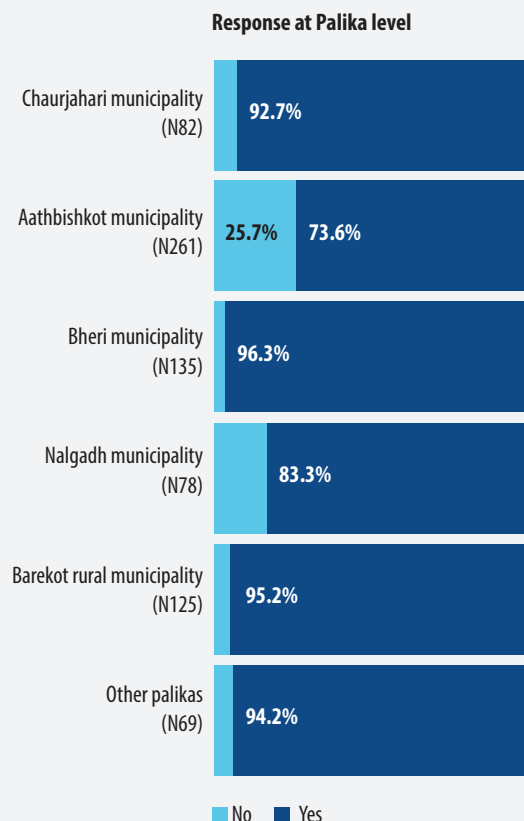
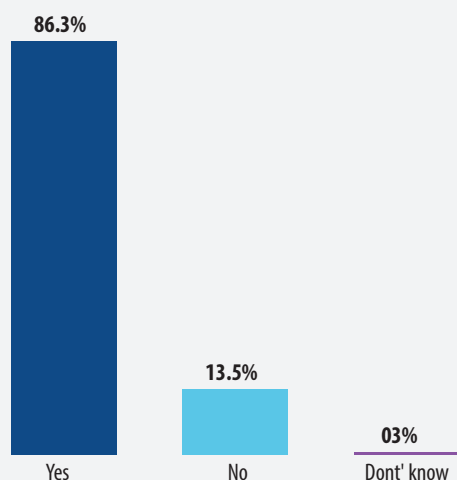
4. Financial Access and Service Providers

The financial access of the impacted population is a crucial aspect to consider while assessing the feasibility of market-based intervention. A large number of the affected households surveyed reported to have a bank account. Those who did not have a bank account reported to get one within 3-4 days of timespan given the cash programming is planned and targeted to those.

Although every Palika has a presence of at least one bank branch, during the Focus Group Discussion (FGD) with the communities, the respondent further elaborated bank branches and/or money transfer agents to be reached within 15 – 45 minutes of walking distance.

Approximately 80-90% of the respondents during the Focus Group Discussion (FGD) reported having a mobile phone, of which approximately 60 % use the internet facilities. Among those accessing the internet, they use smartphones. This indicates the impacted population could access the cash transfer through digital means and/or it could also facilitate voucher deployment.

Do you or any your family members have bank account?



Source: Household survey from Jajarkot and Rukum West

5. Opportunities for Market-based Intervention and CVA

The market assessment reveals that essential food and nonfood items were largely relatively available despite the challenges caused by the earthquake. The market activities have been gradually normalized and the vendors are operating smoothly. Despite the economic crisis and recent festivities, the wholesale market of Surkhet and Nepalgunj are stable with merchants in those areas reported to have sufficient stocks to supply to the earthquake affected to meet the demand, even when it increases.

The transports facilities are operational as compared to pre-earthquake situations and no obstruction has been reported. While small fluctuations in the prices were recorded, however, it gradually started normalizing. Shops regularly open with their full capacity, indicating reasonable accessibility for the affected families.

Overall, the analysis suggests that implementing MPC as part of Cash and Voucher Assistance seems feasible in the earthquake-affected areas. The market assessment provides an optimistic outlook, indicating that CVA can effectively support to meet the basic needs of food and non-food items in the impacted population.

ANNEX

TABLE 1:
AVERAGE PRICES OF FOOD ITEMS IN JAJARKOT, WEST RUKUM AND SURKHET

Food Commodities	Units	Jajarkot	Rukum West	Surkhet
Rice Coarse	Kg	55	63	64
Rice (Sona Mansuli)	Kg	87	95	76
Wheat Flour (Atta)	Kg	70	65	65
Lentil Broken	Kg	166	160	144
Peas	Kg	145	160	
Chickpeas	Kg	174	170	120
Iodized Salt	Kg		23	20
Soyabean Oil	Ltr	201	227	180
Mustard Oil	Ltr		210	185
Sugar	Kg	141	145	121
Milk	Ltr		64	100
Egg	Doz	195	180	180
Fish	Kg	660	700	450
Chicken Meat	Kg	476	479	450
Mutton Meat	Kg	830	800	900
Red Potato	Kg	61	50	56
Tomato	Kg	105	100	70
Carrot	Kg	129		93
Green Peas	Kg	135		80
Pumpkin (Yellow)	Kg	54	60	35
Green Leaves (Rayo saag)	Bundle	42	60	25
Cabbage	Kg	67	50	47.5
Cauliflower	Kg	87	50	42.5
Orange	Kg	93	80	85
Apple	Kg	241	250	165
Banana	Doz	126	128	93

TABLE 2:
AVERAGE PRICES OF ESSENTIAL NON-FOOD ITEMS IN JAJARKOT, WEST RUKUM AND SURKHET

Non-food Commodities	Units	Jajarkot	Rukum West	Surkhet
Toothbrush	Piece	45	27	64
Toothpaste	100 gm.	145		130
Bathing soap	Piece	54	40	46
Washing soap	Piece	51	47	25
Torch Light	Piece	292	129	150
Pfoam	(6 pieces)	220	165	150
LPG Gas	Cylinder	3185	4150	
Tarpaulin	Piece	1675	1500	3726
Blanket	Piece	2925	2150	1800
Cement	Packet	692	800	637
Iron bar	Piece	104	109	101
CGI sheets	Piece	11125	7900	11000
Market wage of unskilled Labour	Per day	956	860	700
Market wage of skilled Labour	Per day	1254	1040	1000

