



Nepal

DISTRICT FOOD SECURITY MONITORING: KALIKOT, KARNALI PROVINCE

March 2024



KEY FINDINGS

Nearly 22 percent of households in Kalikot District consume inadequate diets, and 4.3 percent have poor food consumption. Nearly 27 percent were moderately and severely food insecure, with 1.2 percent severely food insecure, indicating significant food consumption gaps¹.

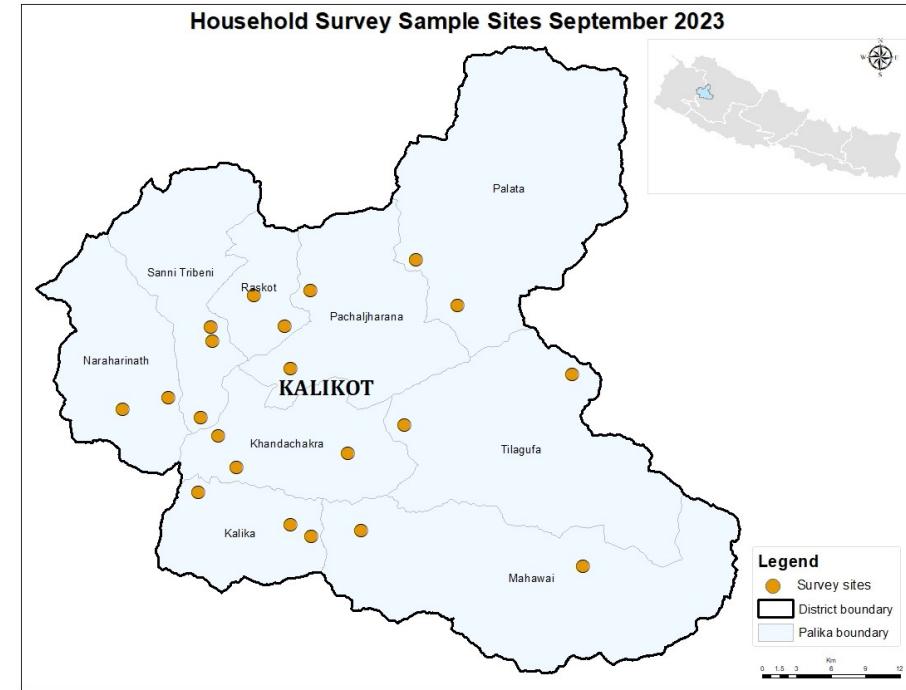
Nearly 38 percent of households reported that they did not have sufficient food to meet their daily food needs in the seven days preceding the survey. Lack of money, no food at home and an increase in the cost of food were the main reasons cited. Nearly 94 percent of households rely on market purchases to meet the majority of their food needs, with domestic production insufficient to meet household food needs, likely due to the area being prone to climatic hazards including drought, and the difficult terrain resulting in low productivity.

Nearly 42 percent of children aged between 6-23 months did not meet the minimum recommended dietary diversity, slightly lower than the national average of 45.4 percent², while over 48 percent did not meet the Minimum Acceptable Diet. Nearly 44 percent of women of reproductive age did not meet minimum dietary diversity, slightly higher than the provincial average of 41.3 percent.





Households experienced at least one shock during the previous year, however the impact of the shocks were low overall. Health and diseases and socio-economic shocks had a relatively higher impact on livelihoods compared to climatic and geophysical shocks, likely due to the poor health and sanitation facilities in the district.

Overall, levels of food insecurity were found to be higher in households headed by women, by illiterate household members, in households with a person with disabilities, smallholder farmers and households relying on social security allowances for income.

Map of Kalikot District



Key figures from the survey

-  37 percent female-headed households
-  5 members per household on average
-  37 percent households rely on agriculture as main source of income
-  60 percent illiterate household heads

¹Based on the Consolidated Approach for Reporting Indicators of Food Security (CARI) which aggregates different food security indicators into one index to report on overall population food security status. CARI assesses availability and access to food through measuring the status of household consumption.

²WFP Nepal Household Livelihoods, Food Security and Vulnerability Survey, April 2023

HOUSEHOLD FOOD AND NUTRITION SECURITY

Over 22 percent of Kalikot's population do not consume an adequate diet, nearly half of infants consume a diet inadequate to ensure appropriate growth and development, and nearly half of women of reproductive age are at risk of malnutrition.

The survey found that around 32,000 people (22 percent) in Kalikot District were not consuming an adequate diet, of which 4.3 percent had poor food consumption³. Findings also showed that nearly 27 percent of households were severely and moderately food insecure (Figure 1). This indicates that there is a food consumption gap in the household, with the household unable to meet their required food needs without adopting any crisis coping strategies.

Nearly 3 percent of households had poor dietary diversity, meaning they had consumed food from fewer than four groups out of a total eight in the previous one-week recall period. This indicates a risk of household members having or developing micronutrient deficiencies due to poor dietary diversity and lack of nutritious food.

Nearly half of children aged 6-23 months (48.8 percent) did not meet the Minimum Acceptable Diet (MAD), a measurement of child feeding practices which when met indicates the diet is adequate to ensure appropriate child growth and development. Over 42 percent of children of the same age did not meet minimum recommended dietary diversity (MDD), indicating that during the 24-hour recall period their diet did not provide adequate micronutrients.

Nearly 44 percent of women of reproductive age (15-49 years) did not meet the minimum dietary diversity (MDD-W), meaning that they consumed food from fewer than five food groups

during the recall period. This indicates a concerning situation of potential malnourishment in a significant proportion of women and children in the district, above the provincial average. This is in-line with the district's low Human Development Index ranking, lower education levels and poor economic access to food.

Nearly 38 percent of households reported that they did not have enough food to meet their daily food requirements. Of those households reporting food insufficiency, 63 percent reported it was due to not having money to purchase food, 18.4 percent due to having no food in the house, and 17.7 percent due to an increase in food prices. However, nearly 97 percent of households reported that they had food stocks, of which 22 percent reported having sufficient food stocks for more than one month, 20 percent for one week, and 19 percent for less than one week.

In terms of consumption of food groups for dietary diversity, out of the total eight food groups, households consumed cereals, vegetables and oil/fat almost every day in the seven-day recall period, followed by milk, pulses and sugar for five days on average. Households consumed fruit and meat least frequently, on average 2.9 days and 1.4 days a week, respectively (Figure 2). These findings indicate a relatively low consumption of certain nutrients key to maintaining dietary diversity.

Nearly 94 percent of households relied mostly on market purchase as the major source of their daily food needs, implying that domestic production is insufficient to meet household food needs. High dependency on market purchases for daily food needs indicate that market prices are a key driving force in food insecurity in the district, leaving a significant number of households exposed to the impact of price inflation and issues with the availability of different foods.

Figure 1: Prevalence of food security

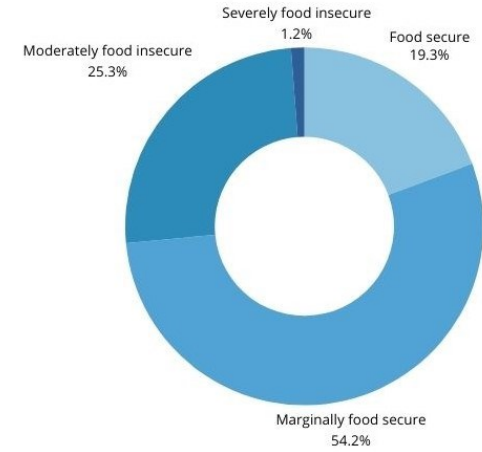


Figure 2: Number of days food group consumed in previous seven days

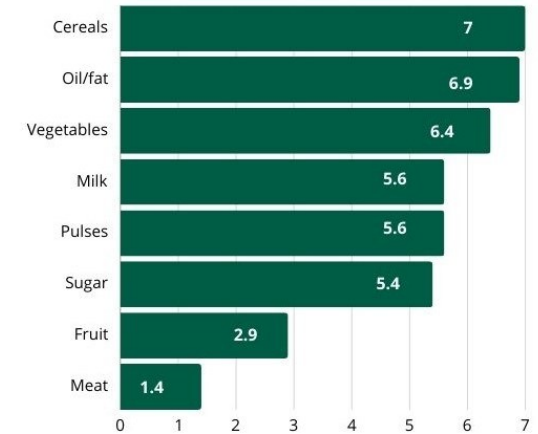
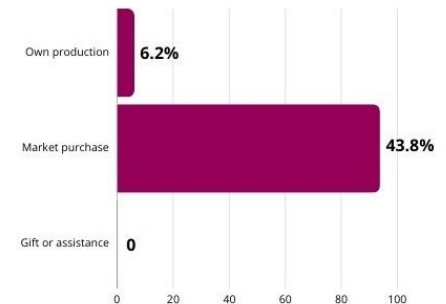


Figure 3: Source of food consumed



³This estimate is based on the Food Consumption Score (FCS) which measures dietary diversity and food frequency. A household food consumption score is calculated according to the types of foods consumed during the previous seven days, the frequencies with which they are consumed, and the relative nutritional weight of the different food groups.

CHARACTERISTICS OF FOOD INSECURE HOUSEHOLDS

Households headed by women were more likely to be food insecure. Households with an illiterate head of household, relying on social security allowances for income and with small agricultural plot sizes were also found to have an increased likelihood of food insecurity.

Socioeconomic characteristics of households continue to play an important role in determining the food security of the households. In Kalikot the proportion of households with inadequate food consumption was found to be higher in households headed by women (28.2 percent) compared to households headed by men (18.3 percent) (Table 1). Similarly, nearly 31 percent of households headed by women were found to be food insecure compared to 24 percent of male headed households.

The education level of household members also impacted the household's food security situation, in particular the education level of the head of household. Over 29.2 percent of households with an illiterate head of household had inadequate food consumption, compared to 16.8 percent of households with a head who had completed secondary education. The education level of female members of the household also had a significant impact, with 29.2 percent of households with illiterate female members having inadequate food consumption, compared to 16.8 percent in households where female members had secondary level education or above. This is likely due to the linkage between higher education and income levels, as well as increased knowledge of healthy diets and nutrition.

The prevalence of food insecurity was found to be higher in the bottom wealth quintile, with 43.6 percent of households found to be marginally and severely food insecure. This compares to 18.1 percent of households in the second lowest quintile, 2 percent in the middle quintile and zero percent in the two highest wealth quintiles (Figure 4).

Nearly 30 percent of households in the lowest wealth quintile were found to have inadequate food consumption, followed by 21.1 percent in the second lowest wealth quintile. By comparison, 4.1 percent of households in the middle wealth quintile had inadequate food consumption, and all households in the two highest wealth quintiles consumed adequate food. This clearly indicates economic access to food as the main driver of food insecurity (Figure 5).

When considering household's agricultural land size, findings showed a correlation between land size and consumption of inadequate diets. In Kalikot, 95 percent of households owned farmland, out of which nearly 88 percent of households had 0.5 hectare or less. Of these households 21 percent consumed inadequate food, compared to 18 percent of households with 0.5 to one hectare. All households with one hectare of land and above were found to consume adequate food (Table 1). Larger land size is associated with increased food production and household income, thereby improving food security and food consumption. Limited productive farmland, insufficient production to meet household needs and limited non-agricultural employment opportunities are key drivers of food insecurity in Kalikot.

Households engaged in cash and high-value crop production were found to be food secure, and those with multiple agricultural activities such as crops and livestock rearing had lower levels of inadequate food consumption (17.7 percent) compared to households relying on a single agricultural activity, including livestock (47.4 percent) and crop production (24.5 percent) (Table 1).

Households relying on a social security allowance as their primary source of income had the highest levels of food insecurity overall, with 32.4 percent of households consuming inadequate food, followed by those relying on non-agricultural daily wage labour (25.5 percent), remittance (23.7 percent), cereal-based agriculture (22.4 percent), agricultural daily wage labour (22.2 percent) and livestock farming (22.2 percent).

Table 1: Food consumption by household characteristic

Food consumption by household characteristics		Inadequate food consumption
Head of household gender	Female	28.2%
	Male	18.3%
Head of household education level	Illiterate	29.3%
	Above secondary	16.8%
Female education	Illiterate	29.2%
	Above secondary	16.8%
Land size	<0.5 ha	21%
	0.5-1 ha	18%
	1-2 ha	0%
	>2 ha	0%
Food stock	Yes	22.4%
	No	7.7%
Agricultural activities	Crop production	24.5%
	Livestock	47.4%
	Cash and high-value crops	0%
	Crops and livestock	17.7%
	Crops, cash and livestock	33.3%
	None	44.4%

Figure 4: Prevalence of food insecurity by wealth quintile

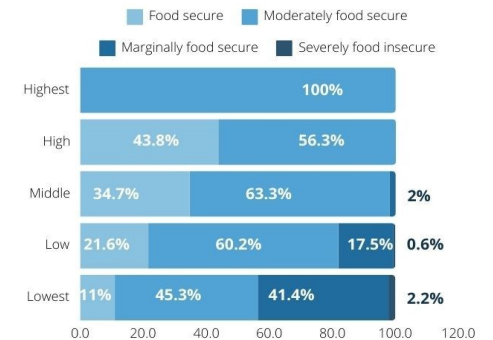
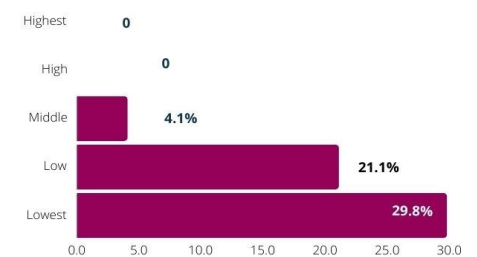


Figure 5: Inadequate food consumption by wealth quintile



LIVELIHOODS, COPING STRATEGIES AND SHOCKS

Agriculture remains the primary source of income for most households, however production is insufficient to meet household food needs. Almost all households experienced a shock during the last year, however the severity was low on average.

Traditional, cereal-based agriculture remains the primary source of income for over 34 percent of households in Kalikot District, followed by remittance (14.1 percent), salaried jobs (12.9 percent) and daily wage labour in the non-agriculture sector (12.2 percent). Nearly all households (96.9 percent) had multiple sources of income (Table 2). Agricultural production in the district remains insufficient to meet household food needs, with farmers reporting that the major agricultural challenges faced were unavailability of seeds when required (3.7 percent), unfavourable weather for plantation (1.7 percent), transportation issues (1.7 percent) and high prices of seeds (1.4 percent).

More than 95 percent of households in Kalikot owned farmland, of which the majority (87.7 percent) were smallholder farmers with less than 0.5 hectare of land. Very few farmers (0.3 percent) had two or more hectare. Over 42 percent of households owned at least one livestock animal, of which 79 percent owned big livestock, 62.5 percent small livestock and 38 percent owned poultry. Half of households in the district reared milking cows and buffaloes.

Nearly 87 percent of households in Kalikot District adopted livelihood coping strategies, likely due to the area being prone to climatic hazards including drought, and the difficult terrain resulting in low productivity. Over 83 percent of households adopted stress coping strategies, followed by crisis coping strategies (3.1 percent) and emergency coping strategies (0.48 percent). The most common types of livelihood coping strategies were borrowing food and money from formal and informal lenders (66.8 percent), followed by

purchasing food and non-food items on credit (65.2 percent), spending savings (9.5 percent), reducing expenditure on health and education (3.3 percent), selling livestock (2.9 percent), selling household goods and assets (1.4 percent) and sending family members elsewhere to eat (1.2 percent).

Over 64 percent of households adopted food-based coping strategies, with nearly 60 percent of households adopting less preferred and expensive foods, followed by borrowing food or relying on help from friends and relatives (34.6 percent), reduced portion sizes of meals (13.8 percent) and reducing the number of meals (11 percent). Adopting food-based coping strategies can lead to a greater risk of food insecurity and consumption of inadequate diet.

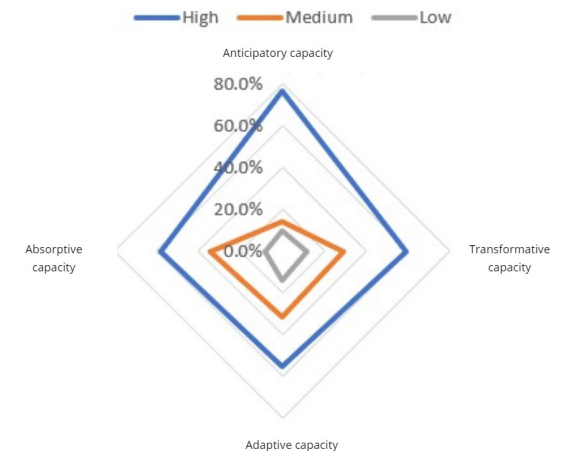
Almost all households experienced at least one shock during the last one-year recall period, however the severity of the impact of the shock was found to be low on average. Across the different shock categories, 36.2 percent of households experienced the impact of socioeconomic shocks, 33.8 percent health and diseases, 31.5 percent climatic and 2.8 percent geophysical.

The household resilience capacity score is an indicator that measures a household's perception of their resilience capacities across four dimensions– anticipatory, transformative, adaptive and absorptive. Overall, the resilience capacity of households in Kalikot District was reported as medium. However 7 percent of households were found to have a low level of resilience capacity across all four dimensions, indicating a higher vulnerability to the impact of shocks and a potential reduction in food security and livelihood resilience if faced with additional shocks.

Table 2: Primary source of household livelihood

Primary source of livelihood	Percentage of households
Cereal-based agriculture	34.1
Daily wage labour (non-agriculture)	12.2
Remittance	14.1
Business and trade (medium and large)	1.4
Daily wage labour (agriculture)	4.3
Business and trade (small)	9.1
Salary from government, I/NGO and private sector	12.9
Cash and high-value crops	0.2
Pension	0.7
Livestock farming and selling	2.1
Other	0
Social security allowance	8.8
Tourism	0
None	0

Figure 6: Household resilience capacity score






METHODOLOGY

WFP Nepal conducted an in-depth household survey in Kalikot District in September 2023 to understand the food security and livelihood situation, driving factors of food insecurity, and the impact of multiple shocks on food security and household resilience capacity.

Kalikot was selected due to its status as one of the most vulnerable districts in the mountain region of Karnali Province, including to the impact of both internal and external shocks on food security and livelihoods. The evidence generated aims to support policy makers and planners to design informed and evidence-based programmes to address the situation in Kalikot District, and as a reference for districts with a similar profile.

The survey used a two-stage sampling design in which 21 primary sampling units (PSUs) were selected, with 20 households selected randomly. Wards were selected through random sampling from a list of all wards from 9 municipalities, both rural and urban. Representatives from a total of 419 households were interviewed through face-to-face interviews.

Other resources:

 [Household Livelihoods, Food Security and Vulnerability Survey, April 2023](#)

 [Monthly market monitoring reports](#)

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