



# Nepal

## DISTRICT FOOD SECURITY MONITORING: BAJURA, SUDURPASCHIM PROVINCE

---

March 2024



## KEY FINDINGS

Nearly **23 percent of households in Bajura District consume inadequate diets**, and 7.5 percent have poor food consumption. **Nearly 15 percent of households were moderately and severely food insecure**, with the household unable to meet their required food needs without adopting coping strategies, including purchasing food on credit and reducing the size of meals<sup>1</sup>.

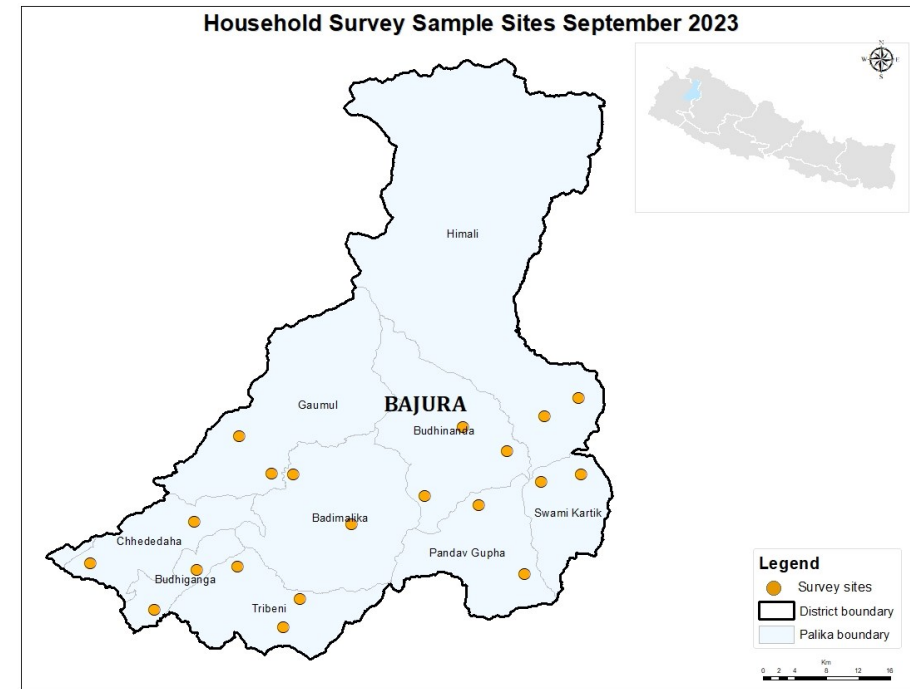
Nearly **4 percent of households reported that they did not have sufficient food available in the household to meet their daily needs** in the week preceding the survey. Lack of money to purchase food and shortage of food in the market were the main reasons cited. With nearly 84 percent of households relying on market purchase to meet the majority of their food needs, lack of economic access and availability of food are key contributing factors of household food insufficiency in the district.

Over **58 percent of children aged between 6-23 months did not meet the minimum recommended dietary diversity**, higher than both the provincial (51.7 percent) and national average (45.4 percent)<sup>2</sup>. Over 69 percent of children did not meet the Minimum Acceptable Diet, and **nearly 47 percent of women of reproductive age did not meet minimum dietary diversity**.

**Almost all households experienced at least one shock during the previous year**. More than 50 percent of households experienced a severe impact of climatic and socio-economic shocks, and nearly 27 percent the impact of health and disease on their livelihood.

Overall, **food insecurity was found to be higher in certain types of households**. In contrast to the national trend, households headed by men were more likely to be food insecure than those headed by women. Households headed by an illiterate household member, those relying on the income from the informal sector and those in the lowest wealth quintile were more likely to be food insecure.

## Map of Bajura District



## Key figures from the survey



11 percent female-headed households



6 members per household on average



55 percent households rely on agriculture as main source of income



49 percent illiterate household heads

<sup>1</sup>Based 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.

<sup>2</sup>WFP Nepal Household Livelihoods, Food Security and Vulnerability Survey, April 2023

## HOUSEHOLD FOOD AND NUTRITION SECURITY

**Over twenty percent of Bajura's population does not consume an adequate diet, the majority 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.**

Around 31,000 people (22.7 percent) in Bajura District were not consuming an adequate diet, of which 7.5 percent of households had poor food consumption<sup>3</sup>. Over 14 percent of households were moderately food insecure, and nearly one percent severely food insecure (Figure 1). This indicates that within these households there is a food consumption gap, with the household unable to meet their required food needs without adopting any crisis coping strategies.

Nearly five percent of households had poor dietary diversity, consuming food from fewer than four food groups out of eight. This increases the risk and likelihood of household members suffering from micronutrient deficiencies due to poor dietary diversity and lack of nutritious food.

Over 68 percent of children aged 6-23 months 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 58 percent of children did not meet the minimum recommended dietary diversity, indicating that during the 24-hour recall period their diet did not provide adequate micronutrients.

Nearly 47 percent of women of reproductive age (15-49 years) did not meet the minimum dietary diversity (MDD-W), consuming food from fewer than five food groups during the recall period. These findings indicate a severe situation concerning the malnutrition of women of reproductive age

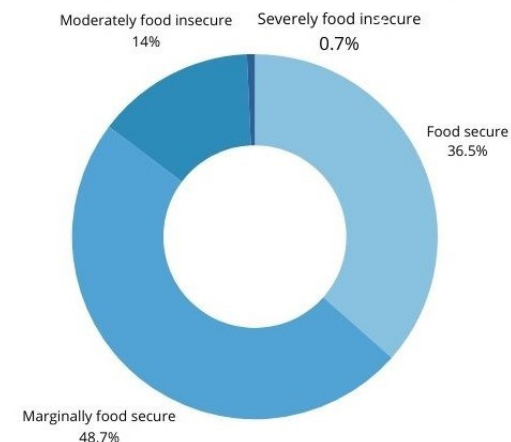
and children, with a potential impact on child development and the health of women, especially while pregnant and breastfeeding.

Household food stock is considered an indicator of food security, particularly in rural areas. In Bajura, nearly four percent of households reported having insufficient food to meet their daily food requirements. The main reasons reported were due to not having enough money to buy food (78.6 percent), followed by shortage of food in the market (14.3 percent) and having no food in the house (7.1 percent). However, over 99.5 percent of households reported sufficient food stocks, of which 53 percent of households had sufficient food stocks for more than one month, five percent for one week, and 3.3 percent for less than one week.

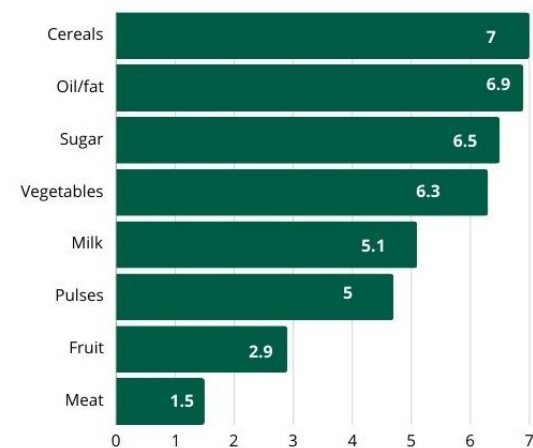
In terms of consumption of food groups, out of the eight food groups, in the seven-day recall period households consumed cereals, oil/fat, sugar and vegetables almost every day, followed by milk and pulses for five days on average. Households consumed fruit and meat less frequently, on average 3 and 2 days per week on average, respectively.

Nearly 84 percent of households relied largely on market purchase for their daily food needs. This indicates that food production in the district is insufficient, largely due to the dependence on rain-fed agriculture. This results in the majority of households being exposed to the impact of price inflation and potential issues with the availability of different foods, impacting food security and dietary diversity.

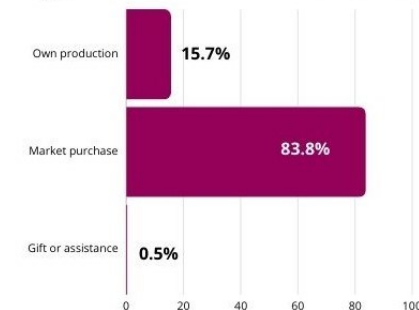
**Figure 1: Prevalence of food security**



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



**Figure 3: Source of food consumed**



<sup>3</sup>This 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 men were more likely to be food insecure than those headed by women. Other characteristics found to increase the likelihood of food insecurity and inadequate food consumption included having an illiterate head of household, relying on the informal sector for income, being in the lowest wealth quintile and having smaller plots of agricultural land.**

The socioeconomic characteristics of a household play an important role in determining food security. In Bajura, contrary to most districts and the national average, male-headed households were found to have significantly higher levels of food insecurity (16 percent) and inadequate food consumption (23.5 percent) (Table 1) than female-headed households (4.7 percent food insecurity and 16.3 percent inadequate food consumption).

The findings of the survey showed that the proportion of households consuming an inadequate diet nearly doubled between households with a literate head of household (17 percent) and those with an illiterate head of household (33 percent). Likewise, nearly 43 percent of households with illiterate female members had inadequate food consumption, while 20 percent of households with women who had completed at least secondary level of education consumed an inadequate diet. 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 highest in the lowest wealth quintile. Over 18 percent of households in the lowest wealth quintile were marginally and severely food insecure, while all households in the highest wealth quintile were food secure.

Over 26 percent of households from the lowest wealth quintile had inadequate food consumption, followed by 25 percent from

the middle quintile, while no households in the high and highest quintile had inadequate food consumption (Figure 5). This demonstrates the role economic access to food plays as the main driver of food insecurity, however in Bajura it is notable that the middle wealth quintile had higher levels of both food insecurity and inadequate food consumption than the quintile below.

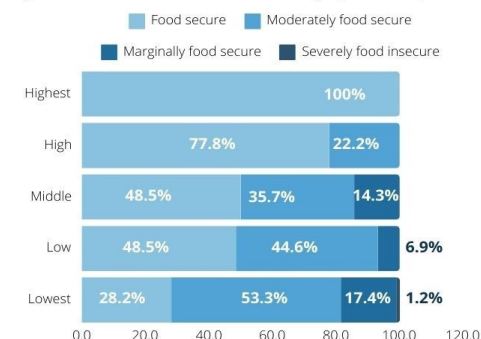
When considering the agricultural activities of the household, households engaged in cash and high-value crop production mostly had adequate food consumption, while a high proportion of households engaged in traditional agricultural activities such as cereal crop production had inadequate food consumption (35.1 percent) (Table 1). Households relying on daily wage labour as their primary source of income had a higher prevalence of food insecurity overall, with over 66 percent of households relying on daily wage labour in the agriculture sector having inadequate food consumption. Households relying on daily wage labour in the informal sector and social security allowance also had high levels of inadequate food consumption, at 51.4 and 33.3 percent respectively.

Results showed high disparities in food security based on the size of agricultural land of a household, with larger land size associated with lower levels of food insecurity and inadequate food consumption. For example, 19 percent of households with 0.5 hectare or less of land and 7 percent of households with 0.5-one hectare of land had inadequate food consumption, whereas households with over one hectare had adequate food consumption (Table 1). Likewise, of households with less than 0.5 hectare of land 37 percent were severely food insecure and 12 percent moderately food insecure, whereas no household with one hectare of land and above was severely food insecure.

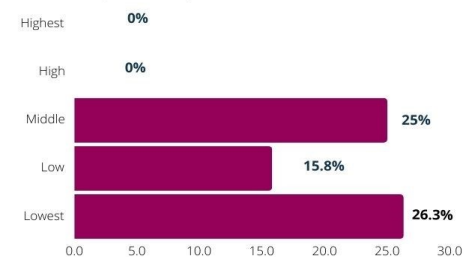
**Table 1: Food consumption by household characteristic**

| Food consumption by household characteristics |                           | Inadequate food |
|---|---------------------------|-----------------|
| Head of household gender                      | Female                    | 16.3%           |
|   | Male                      | 23.5%           |
| Head of household education level             | Illiterate                | 32.5%           |
|   | Above secondary           | 16.7%           |
| Female education                              | Illiterate                | 42.9%           |
|   | Above secondary           | 19.7%           |
| Land size                                     | <0.5 ha                   | 19%             |
|   | 0.5-1 ha                  | 7%              |
|   | 1-2 ha                    | 0%              |
|   | >2 ha                     | 0%              |
| Food stock                                    | Yes                       | 22.6%           |
|   | No                        | 50%             |
| Agricultural activities                       | Crop production           | 35.1%           |
|   | Livestock                 | 12.5%           |
|   | Cash and high-value crops | 0%              |
|   | Crops and livestock       | 15.6%           |
|   | Crops, cash and livestock | 12.5%           |
|   | None                      | 0%              |

**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 in Bajura. Unfavourable planting weather and unavailability of agricultural inputs impacts productivity, with households being forced to adopt coping strategies to meet food needs.**

Cereal-based agriculture was the primary source of income for the majority (55.2 percent) of households in Bajura, followed by remittance (12 percent), salaried jobs (9 percent) and daily wage in the non-agriculture sector (8.7 percent) (Table 2). Nearly 97 percent of households had more than one source of income. Agricultural production in Bajura is not sufficient to meet household food needs. Households with income from agriculture reported that the major challenges they faced were unfavourable weather for timely crop plantation (46.3 percent), unavailability of fertilizer (7.5 percent), high prices of seeds (5.2 percent) and fertilizer (4.9 percent), unavailability of seeds (3 percent) and transportation issues (3 percent). This resulted in reduced production and lower household food consumption.

More than 98 percent of households owned farmland, of which the majority (88.1 percent) were smallholder farmers with less than 0.5 hectare. Over 40 percent of households owned at least one livestock animal. The highest proportion owned big livestock (88.5 percent), followed by small livestock (71.9 percent), milking cows and buffaloes (55.4 percent) and poultry (28.1 percent).

Nearly 57 percent of households in Bajura District adopted at least one livelihood coping strategy, of which 53 percent adopted stress coping strategies, followed by crisis coping strategies (3.3 percent) and emergency coping strategies (0.3 percent). The most common types of coping strategies were purchasing food and non-food items on credit (48.7 percent),

borrowing money from formal and informal lenders (35.2 percent), spending savings (19.2 percent) and reducing expenses on health and education (3 percent).

Nearly 8 percent of households adopted at least one food-based coping strategy during the seven-day recall period, with 6.5 percent eating less preferred and expensive foods, 6.2 percent borrowing food or relying on help from friends and relatives, and 2 percent reduced portion sizes of meals. Adopting food-based coping strategies can lead to a greater risk of households consuming an inadequate diet.

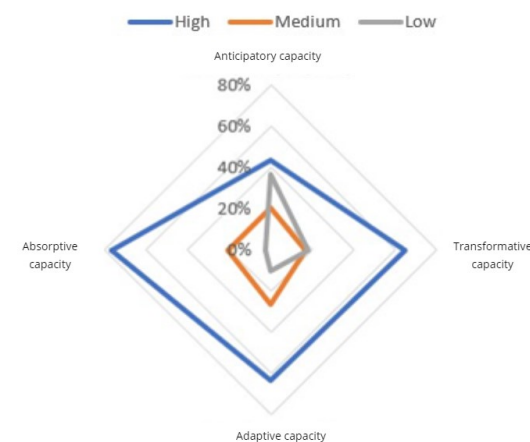
Almost all households experienced at least one shock during the one-year recall period, however the impact of the shock was found to be low for the majority of households. Across the different types of shock categories, 56.2 percent of households experienced socioeconomic shocks, 50.3 percent climatic, 26.5 percent health and diseases and 14.8 percent geophysical. A small number of households reported an impact from all forms of shock, likely due to the households having a low resilience capacity, which can result in even small shocks having a more severe impact.

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 Bajura was reported as medium, with the majority of households (76.8 percent) reporting a high level of absorptive capacity. However, over one third of households (36.5 percent) had a low level of anticipatory capacity (Figure 6).

**Table 2: Primary source of household livelihood**

| Primary source of livelihood                     | Percentage of households |
|--|--------------------------|
| Cereal-based agriculture                         | 55.2                     |
| Daily wage labour (non-agriculture)              | 8.7                      |
| Remittance                                       | 12                       |
| Business and trade (medium and large)            | 1.5                      |
| Daily wage labour (agriculture)                  | 0.7                      |
| Business and trade (small)                       | 6.2                      |
| Salary from government, I/NGO and private sector | 9                        |
| Cash and high-value crops                        | 0.7                      |
| Pension  | 0                        |
| Livestock farming and selling                    | 3.2                      |
| Other  | 1                        |
| Social security allowance                        | 1.5                      |
| Tourism  | 0                        |
| None   | 0                        |

**Figure 6: Household resilience capacity score**




## METHODOLOGY

WFP Nepal conducted an in-depth household survey in Bajura 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.

Bajura was selected due to its status as one of the most vulnerable districts in the mountainous Sudurpaschim 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 Bajura District, and as a reference for districts with a similar profile.

The survey used a two-stage sampling design in which 20 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 400 households were interviewed through face-to-face interviews.

### Other resources:

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

 [Monthly market monitoring reports](#)

**Photo credits:** WFP/Samantha Reinders

