



Lao PDR,
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FOOD SECURITY MONITORING BRIEF

LAO PDR

June 2025



World Food
Programme

Mobile Vulnerability Analysis and Mapping (mVAM)

Executive Summary

- National food insecurity in Lao PDR has continued to decline, reaching a record low of 6% as of June 2025, the lowest level recorded since mVAM monitoring began in 2022.
- Provincial food insecurity in Lao PDR is shaped by localized socioeconomic and geographic conditions, often diverging from national trends. This underscores the importance of context-specific interventions tailored to local realities. Despite overall national improvements, food insecurity has worsened in provinces such as Salavanh and Khammouan which was driven by recent flooding and persistent structural vulnerabilities that continue to undermine household resilience.
- Vulnerable households, particularly those with low levels of education, irregular income sources, and larger family sizes continue to rely on crisis to severe coping strategies to meet their basic food needs.
- Principal Component Analysis (PCA) revealed distinct household coping patterns, showing that education, income source, and household size significantly influence the severity and type of food based coping strategies employed by the households.

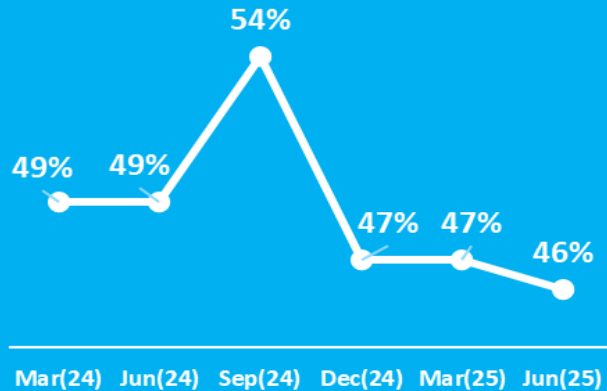
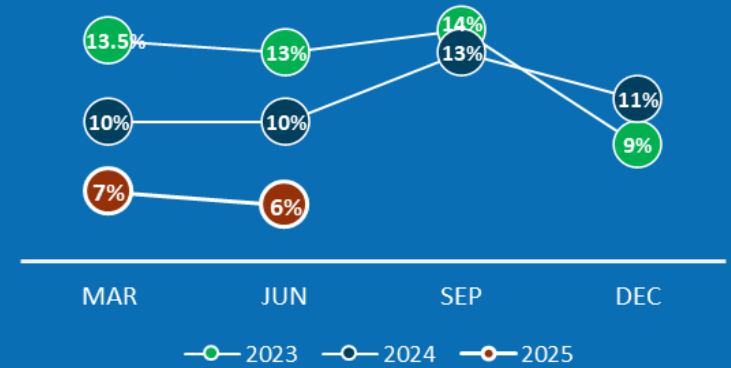
Lao PDR: IN NUMBERS

About one in seventeen households (6%) is currently experiencing food insecurity (rCARI)¹

¹ Remote Consolidated Approach for Reporting Indicators of Food Insecurity (CARI).

8%
of households in rural areas are food-insecure, compared to 4% of those in urban areas

Food Insecurity (rCARI) trends

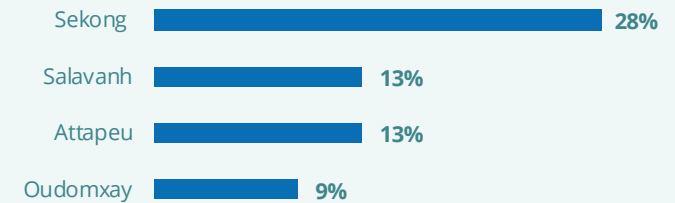


46%

TURNING TO COPING STRATEGIES
*Livelihood-based coping strategies



Food security varies across different parts of the country



I Background

To monitor food security and vulnerability trends across the Lao People's Democratic Republic (Lao PDR), the United Nations World Food Programme (WFP) conducts quarterly mVAM (mobile Vulnerability Analysis and Mapping) surveys. The 19th data collection took place from 1-30 June, reaching a 95% response rate with 2,055 out of 2,160 targeted interviews completed. This round, like previous ones, incorporates WFP's corporate food security indicators Food Consumption Score (FCS), Reduced Coping Strategies Index (rCSI), and the Livelihood-based Coping Strategies Index (LCSI) to calculate the rCARI and track changes over time.

The June 2025 mVAM report presents an in-depth analysis of evolving food security trends, with a focus on identifying provincial and socioeconomic disparities among household groups. Building on previous assessments, the report introduces advanced methods such as Principal Component Analysis (PCA) to visualize coping strategy patterns and their links to key household characteristics.

The report begins with an overview of national and provincial food insecurity trends and shifts since March 2025. It then explores key findings on food consumption patterns, coping strategy behaviors, and socioeconomic drivers of vulnerability. A focus study using PCA provides a data driven classification linked to food insecurity, offering insights to better inform targeting and programme.



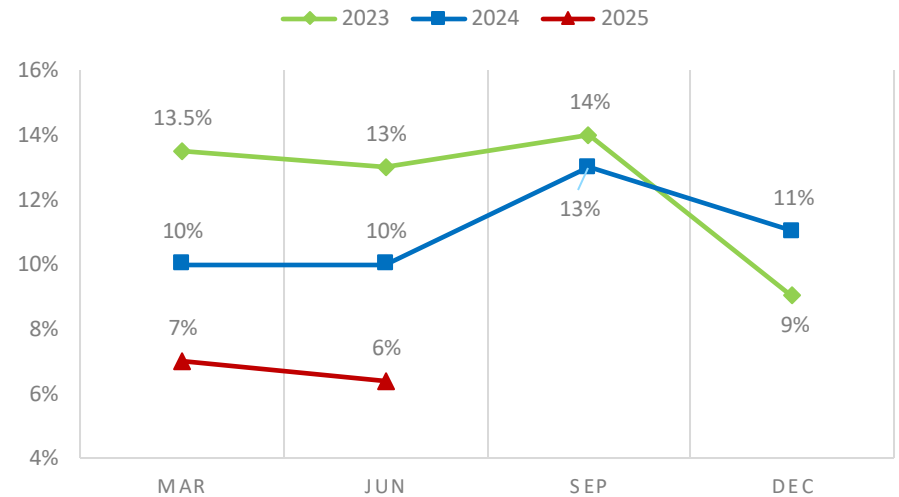
II Food Security Situation Overview (2nd quarter)

1. Update on food insecurity trends

According to the analysis of the mVAM data collected in June 2025, the food security situation in Lao PDR has shown the most significant improvement since mVAM surveys began in 2022. Not only has food insecurity improved compared to the same quarter in the past two years, it is also lower than after the last harvest, when improvements are usually noticeable. The 2023 trend reflects a classic seasonal pattern with a mid-year spike in food insecurity and end-of-year improvement during the harvest period. This suggests that food insecurity is still highly sensitive to seasonal and external shocks. The rise in food insecurity from March to September in 2024 mirrors this trend, reinforcing the persistence of seasonal stress across years.

More specifically, the national food insecurity (rCARI) declined from 13% in June 2023 and 10% in June 2024 to a record low of 6% in June 2025. (Figure 1). Given the consistent seasonal patterns observed in past years, where food security trends from March typically continue through June, the already low 7% food insecurity rate reported in March 2025 hinted at a good outlook for the second quarter. These results suggest that household food security in Lao PDR is not only improving but doing so consistently across years, pointing to a gradual strengthening of food systems and resilience at the community level.

Figure 1. Food Insecurity Trend (2023 – 2025)



2. Comparison of food insecurity trends by province

Food insecurity in Lao PDR varies widely across provinces, driven by seasonal patterns and localized socioeconomic and geographic conditions. These disparities are shaped by factors affecting food availability, access, and utilization, including agricultural productivity, market connectivity, household income, and education levels. Consequently, provincial food security outcomes often diverge from national averages, underscoring the need for localized analysis and targeted interventions.

II Food Security Situation Overview (2nd quarter)

2.1 Provinces with Higher Food Insecurity than the National Average (6% in June)

In Lao PDR, food insecurity varies significantly across provinces, largely influenced by seasonal patterns as well as local socioeconomic and geographic conditions. This points to persistent chronic vulnerability in provinces such as Sekong and Attapeu, where households are more likely to be affected by agricultural challenges, natural disasters, or entrenched poverty factors that can further limit their access to food and their ability to utilize it effectively

2.2 Provinces with Worsening Food Insecurity Compared to March 2025

Despite the national improvement from 7% in March to 6% in June 2025, five provinces: Xiengkhouang, Sekong, Vientiane, Salavanh, and Khammouan experienced a rise in food insecurity. While Sekong continues to show chronic levels of food insecurity and some provinces only saw marginal changes, Salavanh stands out with a notable increase from 9% to 13%.

This could be due to temporary shocks such as frequent floods with the onset of the monsoon, or prolonged rainfall that affects access to markets. In fact, available data indicates a potential correlation between flood-affected areas and increased food insecurity. These contrasting trends will be further explored in the Key Findings section through selected provincial case studies to better understand the underlying drivers of change.

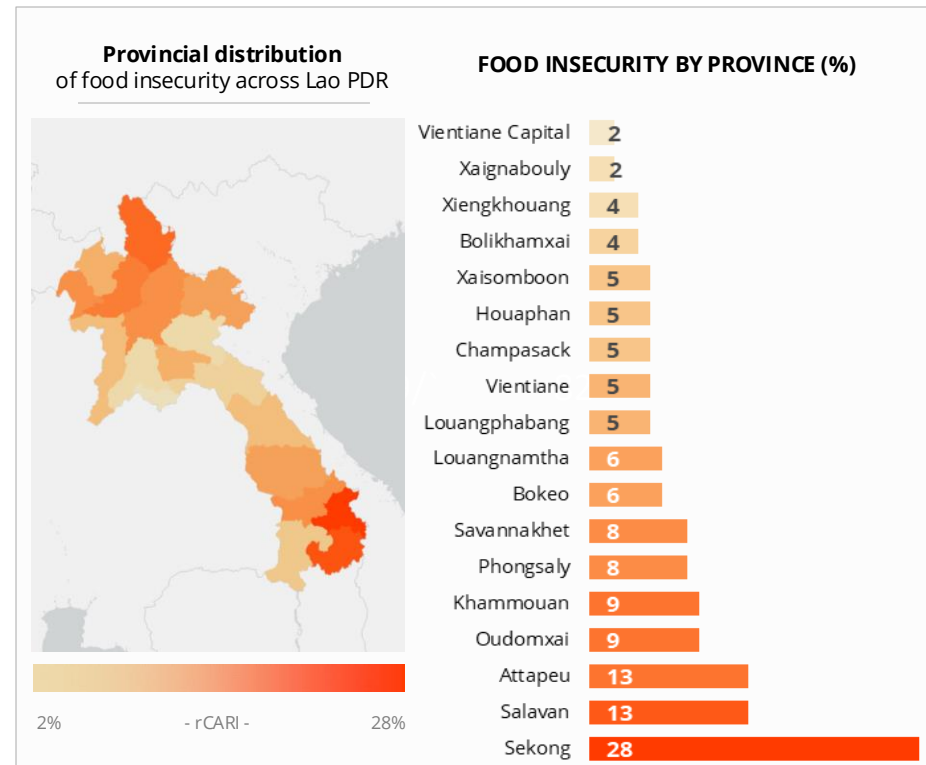


Figure 2. Food Insecurity by province

III Key Findings

1. Provinces with Worsening Food Insecurity

While overall food insecurity in Lao PDR showed a modest improvement in the second quarter of 2025, a closer look at the provincial level reveals concerning trends in five provinces: Sekong, Salavanh, Khammouan, Vientiane, and Xiengkhouang where food insecurity has worsened compared to March 2025. These deviations from the national trend suggest the presence of localized shocks or chronic vulnerabilities that offset the broader improvements observed in other provinces. Among the five provinces that experienced a deterioration in food security, Vientiane and Xiengkhouang were excluded from the case study because the changes observed were relatively minor, with fluctuations of around 1%. Also, Sekong was excluded, as its food insecurity level, which increased from 25% to 28%, is considered part of a long-standing chronic pattern and therefore not the focus of this analysis (see Figure 3).

In contrast, Salavanh and Khammouan, located in the central and southern regions of the country, showed more significant increases in food insecurity. In Salavanh, the rate rose from 9% to 13%, while Khammouan experienced an increase from 6% to 9% (see Figure 4). These changes were considered to warrant further examination through a case study.

Figure 3. Food Insecurity trend in Sekong

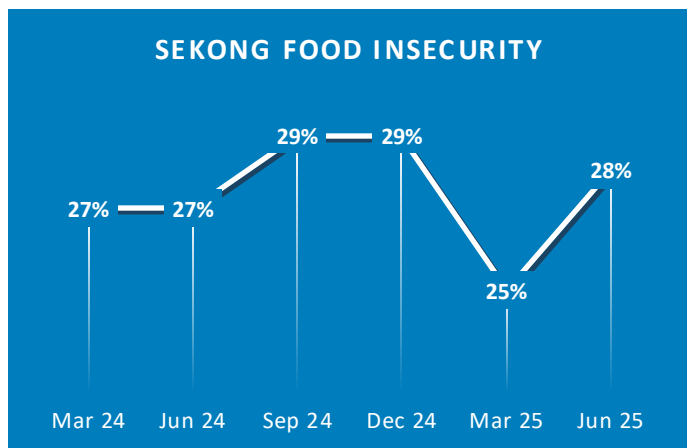
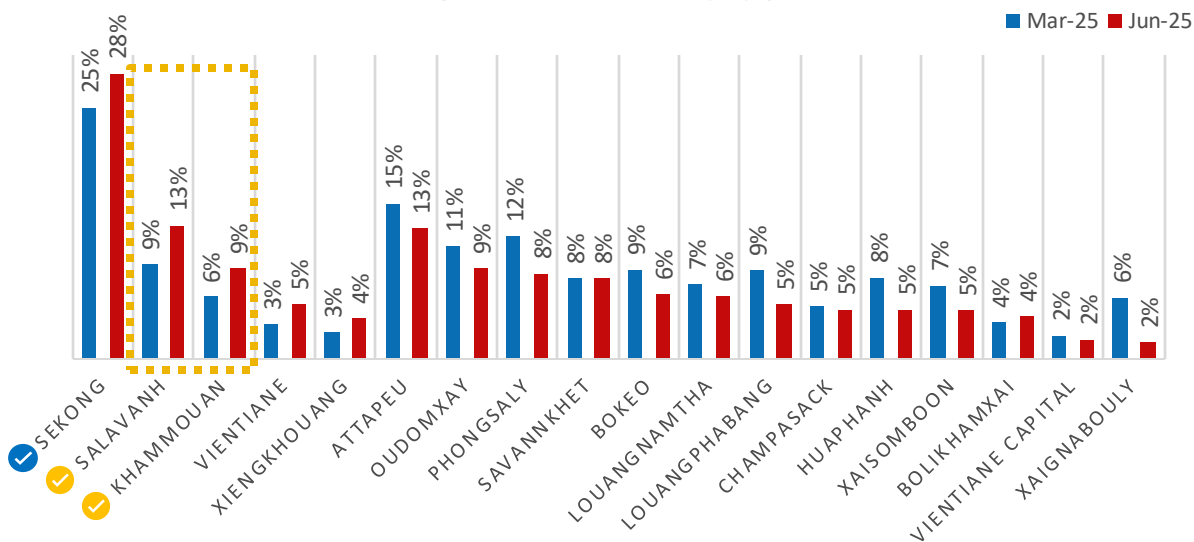


Figure 4. Food Insecurity by province



III Key Findings

2. Case Studies: Salavanh

In Salavanh, the increase in food insecurity by 4% points is assessed to be the result of weakened local resilience caused by external shocks during the period from April to June. According to data by Provincial Department of Labour and Social Welfare, the province experienced flood related damage in June 2025. A total of 7 households reported food losses, and 16 irrigation systems were damaged, which could negatively affect agricultural productivity. In addition, in terms of agriculture and livestock, 12,251 hectares of lowland rice fields were partially damaged, a significant loss of livestock was reported. From the perspective of social infrastructure, 45 roads and 14 bridges and culverts were partially damaged, which may have further limited market access and delayed food assistance in rural areas. These factors can be assessed as having had direct and indirect effects on the availability and accessibility of food in the province.

In this sense, the recent increase in food insecurity observed in Salavanh can be primarily attributed to an external short-term shock such as the flooding. However, the deterioration should not be viewed solely as the outcome of a one-off climatic incident. Rather, it reflects the province's long-standing structural vulnerabilities that have historically undermined its capacity to recover from and adapt to such disruptions. The flood acted as a trigger, but the scale of its impact was amplified by weak infrastructure, limited access to services, and chronic poverty, all of which have constrained the local food system's resilience.



III Key Findings

3. Case Studies: Khammouan

The rise in food insecurity of Khammouane Province (located in the central region) from 6% in March to 9% in June 2025 is also a concerning trend. Compared to the northern and southern regions where food insecurity has historically been higher, Khammouane has generally remained more stable. However, the recent rise in food insecurity despite the area not yet being affected by flooding, likely reflects structural and localized challenges such as limited access to agricultural inputs and rising production costs, which may have constrained both food supply and household livelihoods.

According to the CFSAM report, smallholder farmers in Nongbok District, Khammouane Province, have faced challenges in securing seeds, fertilizers, and other agricultural inputs due to rising prices and the lack of adequate financial support. This has not only limited their capacity to maintain or expand food production, but also increased their reliance on remittances and alternative livelihood options. The situation has been further exacerbated by growing labor outmigration, as reported in several villages across Khammouane, with workers leaving rural areas in search of better income opportunities.¹ These are structural vulnerabilities that result in increased food insecurity in the province over the long term.

As food insecurity intensifies, affected households may become more vulnerable to adopting negative coping strategies, such as reducing meal frequency or relying on informal borrowing, which can undermine long term nutrition, health, and economic stability. These coping strategies, while necessary in the short term, can lead to long-term consequences such as reduced nutritional diversity, increased household debt, and a decline in agricultural productivity.

While national level rCARI points to overall progress, these provincial variations suggest the continued presence of food insecurity pockets and underscore the need for targeted, context specific interventions that address the unique vulnerabilities of each province. For example, provinces like Kammouan need development-oriented interventions that address structural constraints, while areas like Salavan could benefit more from long-term structural development combined with immediate shock responsive assistance. Therefore, Based on this multi-layered understanding and support, reducing food insecurity through prioritization of resources and technical assistance can be effective.

1. FAO & WFP (2025). *Crop and Food Security Assessment Mission (CFSAM) to the Lao People's Democratic Republic*, p.51

III Key Findings

4. Food Consumption Patterns by Province and Household Characteristics

The food consumption analysis shows that nationally, 85% of households fall under the acceptable food consumption score (FCS), while 12% are borderline and 3% are poor. Urban households have better food consumption levels, with 92% in the acceptable group compared to 82% in rural areas.

When disaggregated by province, provinces such as Salavanh and Khammouan identified in the previous section "case studies" as having higher levels of food insecurity also demonstrate poor food consumption patterns. In Sekong, only 61% of households are in the acceptable category, and 15% fall into the poor group, the highest rate of food consumption inadequacy nationwide. Other provinces with concerning figures include Salavanh and Khammouan, each reporting 24% of households in the borderline group and only 73 and 75%, respectively, in the acceptable range.

When disaggregated by household characteristics, food consumption is clearly linked to socioeconomic factors. Households headed by individuals with no formal education show only 76% acceptable food consumption, compared to 96% among those with secondary or higher education. In terms of the income source, households with regular income sources report 90% acceptable FCS, while those with no income show only 69% with 8% in the poor group. Income changes and borrowing behaviors may further influence food security levels. For instance, households that reported receiving food as a gift had only 45% in the acceptable group, compared to 89% for those purchasing food with cash. These patterns indicate the importance of targeted support to vulnerable groups with limited education, unstable income, or restricted access to markets. This analysis is consistent with the findings from the previous quarter's mVAM data.

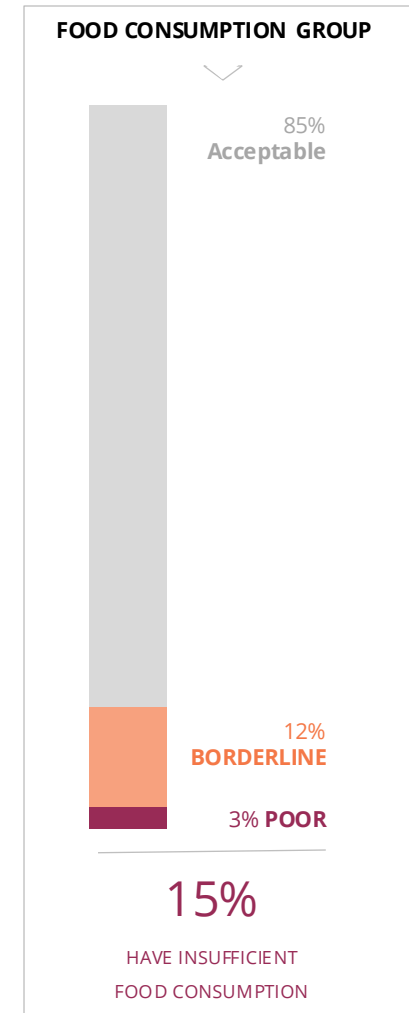


Figure 5. categorized food consumption

III Key Findings

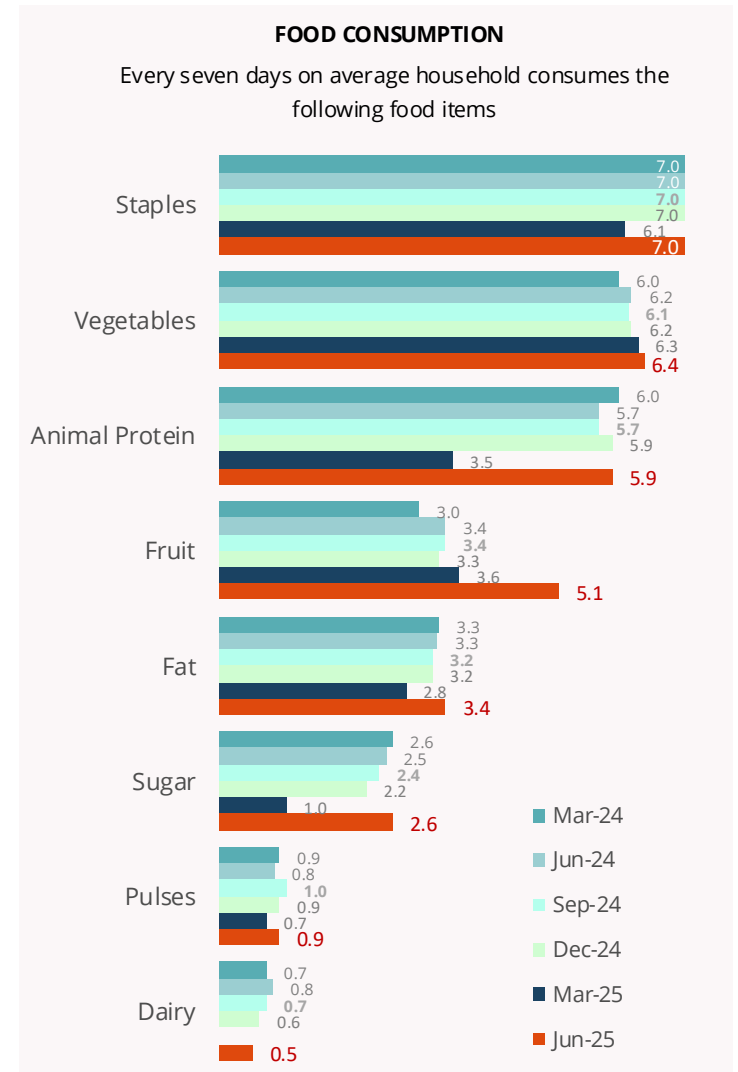
5. Trends in Household Food Consumption Frequency (2024-25)

The frequency of staple food consumption has remained stable across all rounds, consistently at seven times per week. Vegetable consumption showed a gradual upward trend, increasing from 6.0 times in March 2024 to 6.4 times in June 2025, suggesting improved access or availability. Fruit consumption rose notably from 3.0 in March 2024 to 5.1 in June 2025, representing the most significant improvement among all food groups. This is because many tropical and subtropical fruits become abundant in Lao PDR between May and August, with June being a key month. During this period, fruits are widely available in both markets and home gardens, making them more accessible in terms of both physical availability and affordability.

In contrast, the frequency of animal protein consumption fluctuated, peaking at 6.3 times in March 2025 before dropping again to 5.9 in June. Sugar and fat consumption remained relatively stable with minor variations, while pulses and dairy continue to remain low and stagnant throughout the period. Dairy consumption, in particular, decreased to just 0.5 times per week by June 2025.

The fluctuations in protein and fat consumption suggest the need to expand dietary options that contribute to essential nutrients. In particular, developing targeted guidelines to promote dietary diversity through affordable and accessible sources of protein and fat could help improve nutritional adequacy in vulnerable households. Encouraging the inclusion of a broader range of food items within these groups may strengthen overall dietary quality and resilience to market or seasonal events.

Figure 6. Frequency of food consumption



III Key Findings

6. Coping Strategy Trends: Food based / Livelihood Based Responses

Food-based coping strategies involve changing eating habits due to limited food access. The data showing food-based coping strategies surveyed in June suggests a shift toward more medium coping behaviors. Between March and June 2025, there was a slight improvement in the proportion of households using high coping strategies, decreasing from 5% to 4%. However, this improvement came with a rise in medium coping strategies from 40% to 45%, while those reporting no or low coping decreased from 55% to 51%. This shift implies that while severe coping behaviors such as skipping meals may have reduced slightly, more households began relying on moderate food-based coping mechanisms. In other words, the shift is toward more moderate but regular coping behaviors*, rather than indicating continued pressure on household food access. For example, households may not skip meals altogether, but they may routinely reduce portion sizes, dilute food, or consume less preferred foods to stretch their resources.

The proportion of households turning to livelihood-based coping strategies has shown slight seasonal fluctuation over the reporting periods. From March to June 2024, the rate remained stable at 49% before peaking at 54% in September 2024, likely reflecting stress during the lean season. This figure then declined to 47% by December 2024 and remained relatively stable through March and June 2025, reaching 46% in the most recent round. The overall trend suggests a slight improvement or stabilization in reliance on livelihood-based coping strategies, though nearly half of all households continue to depend on such measures. This highlights that roughly half of households still report persistent vulnerability, and require ongoing livelihood support, particularly during periods of crop failure and climate events.

Food-based coping strategies may reflect short-term access constraints that fluctuate in response to factors such as inflation, seasonal events in Lao PDR. In contrast, livelihood-based coping strategies often signal more serious structural vulnerabilities that require long-term intervention. From this perspective, the recent downward trend in livelihood-based coping strategies can be seen as a positive development, suggesting a gradual reduction in chronic food insecurity at the national level.

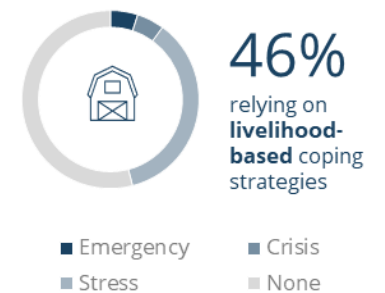
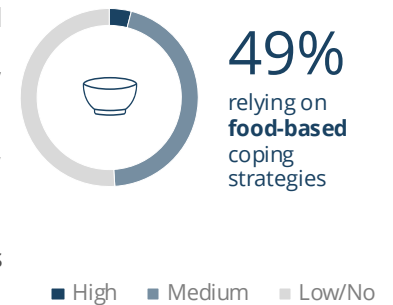


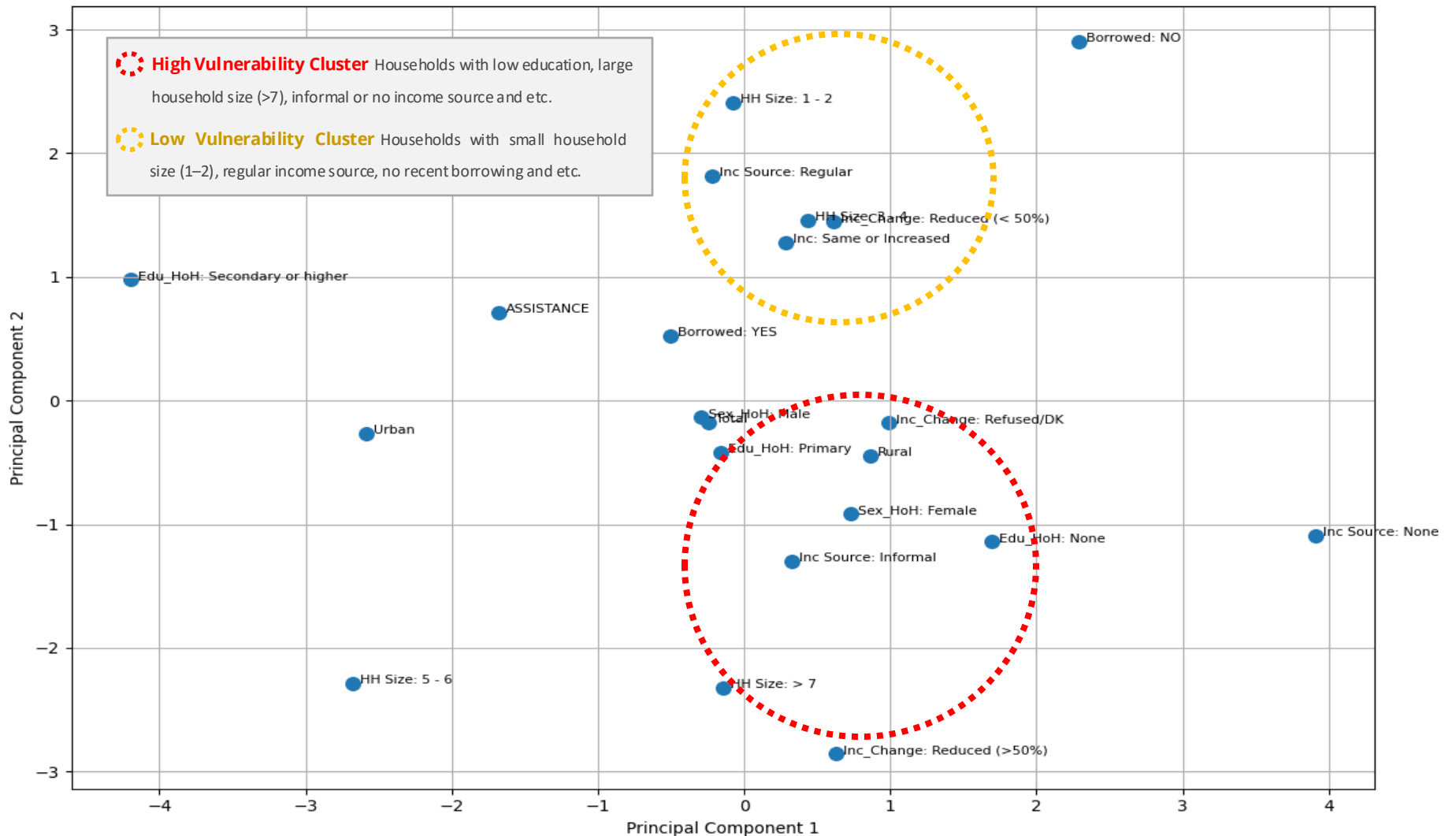
Figure 7. Coping strategy

*It refers to responses to less extreme but more frequently used strategies. For example, households may begin to regularly reduce meal portions or rely on cheaper food options as a consistent way to manage food insecurity.

IV Focus study

PCA Analysis: Clustering of Household Characteristics in Relation to Food Security Coping Strategies

Figure 8. PCA plot of food insecurity categories (rCSI and LCSi)



IV Focus study

PCA Analysis: Clustering of Household Characteristics in Relation to Food Security Coping Strategies

The purpose of this analysis is to explore how different household characteristics such as education, income, household size, and borrowing relate to food security coping strategies measured through the Reduced Coping Strategy Index (rCSI) and the Livelihood Coping Strategy Index (LCSI). To achieve this, Principal Component Analysis (PCA) was employed, which is particularly useful for visualizing underlying patterns and relationships among complex, multivariate indicators. In this context, PCA allowed for the two-dimensional mapping of rCSI and LCSI related households categories with similar food security behaviors.

As shown in the graph on the previous page (see Figure 8), The first principal component (PC1) appears to reflect socioeconomic vulnerability. Variables such as "Income Source: None," "Edu_HoH: None," and "HH Size: > 7" are located on the positive side of PC1, indicating high vulnerability and strong reliance on coping strategies. In contrast, variables such as "Edu_HoH: Secondary or higher," "Urban," and "Borrowed: YES" cluster on the negative side, representing households with lower dependence on negative coping strategies and, potentially, greater resilience.

The second principal component (PC2) seems to represent the intensity and nature of coping mechanisms themselves. Indicators like "Borrowed: NO," "Income Source: Regular," and "HH Size: 1 - 2" are situated in the upper part of the plot, suggesting limited coping needs or effective mitigation strategies, while "HH Size: 5 - 6" and "Income Change: Reduced >50%" appear in the lower section, indicating more severe coping behaviors.

This PCA-based analysis was used to validate the data to determine how households' characteristics influence coping behaviors in food insecurity situations. Education, income stability, household size, and access to financial services are closely linked to coping dynamics. Programme designers could consider these differentiated profiles to tailor interventions accordingly. Households with overlapping vulnerabilities especially, those combining low education, unstable income, and larger sizes should be prioritized for sustained support. At the same time, households with informal coping mechanisms such as borrowing or assistance should be monitored closely to prevent potential slippage into more severe forms of insecurity.

V Conclusion

The findings from the June 2025 mVAM (Round 19) assessment mark the lowest recorded food insecurity rate since the mVAM system was introduced in 2022. However, this positive national trend masks persistent vulnerabilities at the provincial and household levels.

The observed variations in food consumption and coping behaviors highlight the importance of disaggregated analysis. Households with limited education, irregular income, or larger size are more likely to engage in moderate to severe coping strategies, which may threaten long-term food and nutrition security. In this round, Principal Component Analysis (PCA) was introduced as a new tool to visualize and interpret complex household vulnerabilities. This approach identified meaningful groupings of household characteristics related to food security behavior and can inform good targeting strategies in future programming. For example, continued monitoring of vulnerable groups such as those with no income sources or low education could be essential to preventing reversals in progress. The findings imply the value of combining statistical data with contextual understanding to design inclusive, adaptive, and responsive food security interventions in Lao PDR.

Other Resources



ECONOMIC EXPLORER

An overview of prices across different markets (Select Lao PDR)



COUNTRY BRIEFS

A monthly overview of WFP's activities in Lao PDR.

Link : [WFP Lao PDR Country Brief, June 2025 - Lao People's Democratic Republic \(the\) | ReliefWeb](#)



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