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Review Article

Effects of Inflation on Household Food Consumption Pattern: A Case Study of Mongu Town, Zambia

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About Article

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ABSTRACT

Inflation is a macroeconomic goal which makes up a focus for most countries as it affects household welfare, especially in developing countries like Zambia. This study aimed at assessing the effects of inflation on household food consumption patterns in Mongu town of Zambia. Using a mixed method design, 90 households randomly selected constituted a sample and data collected were analyzed in Megastat. The results showed that while consumption is adjusted during inflation, the households reallocate resources towards food expenditure to replace other goods. The chi-square test reveals a statistically significant association between inflation effects and household food expenditure ($\chi^2 = 21.8417$, $p = 0.000$). The regression analysis confirmed a positive correlation between household size and average monthly household food expenditure ($p = 0.0003$, F-value = 14.21), indicating that larger households tend to have higher food expenditure. The chi-square tests also revealed statistically significant associations between inflation and household nutritional intake ($\chi^2 = 75.09$, $p = 0.00$), household income and changes in food consumption patterns ($\chi^2 = 15.38$, $p = 0.0175$), and changes in food quantity and diversity ($\chi^2 = 28.36$, $p = 0.00$). indicating that inflation had a significant impact on household food consumption patterns. Households used coping strategies like reducing non-essential expenses, substituting expensive food with cheaper options, and diversifying income to combat food price inflation. A chi-square test ($\chi^2 = 9.01$, $p = 0.1732$) showed no significant link between education level and perceived effectiveness of these strategies, suggesting similar perceptions across education levels. The study concludes that while inflation affects economic welfare, households decide to assign resources to food and replace other basic commodities. The study recommends that government should implement policies to stabilize food prices and improve food security, such as price controls, subsidies, and food assistance programs.

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1. INTRODUCTION

1.1. Background of the study

Inflation, as defined by the International Monetary Fund (IMF), refers to a sustained increase in the general price level of goods and services in an economy (Seivwright *et al.*, 2024). Household wellbeing is heavily impacted by this phenomenon, mainly in low-income countries like Zambia. Frequently rise of inflation lead to a decline in purchasing power, which can force households particularly with fixed or low incomes to modify their buying pattern, particularly with regard to the essential food related costs (Hayat *et al.*, 2023).

In Zambia, food inflation has been a recurring challenge, disproportionately affecting rural and peri-urban areas like Mongu Town due to limited income sources and market fluctuations. According to the Zambia statics agency, the annual inflation for march 2025 was recorded at 18.9 percent, indicating a significant increase in food prices between march 2024 and march 2025 (ZIPAR, 2025). The primary cause of this inflation rate is changes in the cost basic food including bread, cereals, vegetables and essentials.

According to their spending habits, income levels, and financial planning techniques, people are affected by inflation in different ways (Dilanchiev & Taktakishvili, 2021). As a result of inflation, the price of goods and services goes up, causing people to realign their consumption habits thus reducing discretionary spending, boosting savings, or finding other sources of income (OECD, 2023). Mongu district has a population of 197,816 according to the census of population and housing between 2010 and 2022, the district's population grew at an average rate of 3.6 percent (ZSA, 2022). Due to ongoing inflation, many households are forced to change the way they consume food, by either buying less food or through switching to less expensive, less nutrient food (Chisanga & Zulu-Mbata, 2018). According to Molner and Hajdu (2024), the shift in dietary habit may have an impact on household food security, nutrition, and health effects.

Therefore, understanding this relationship will not only help to gauge the socio-economic burden of inflation but also guide interventions aimed at promoting food security and economic resilience at the household level. According to the Mongu Municipal Council's 2024 strategic plan for 2023 to 2032, the district's geographical location and demographic characteristics underscore the need for targeted interventions to address the challenges posed by inflation and ensure sustainable food consumption patterns among households.

1.2. Statement of the problem

The persistent rise in inflation in Zambia, which has remained above the desired corridor of 6-8 percent for over five years, with the current rate exceeding double digits (BOZ, 2023), has led to a significant increase in household consumption expenditure (Chipili, 2022). According to the 2022 Living Conditions Monitoring Survey report, the average monthly household consumption expenditure has doubled from K1,588 in 2015 to K3,288 in 2022 (ZSA, 2022). However, the impact of inflation on household consumption patterns appears to be inconsistent, with some households seemingly unaffected while others have been severely affected (IPC, 2024). This variation in impact raises questions about the true effects of inflation on household food consumption patterns, particularly in areas like Mongu Town. Without concrete data on this relationship, policymakers and development partners may struggle to design effective support mechanisms. Therefore, this study aims to assess the effects of inflation on household food consumption patterns in Mongu Town, seeking to fill the existing knowledge gap and inform evidence-based policy interventions.

1.3. Research objectives

The study has the general objective and three specific objectives as highlighted in the subsections below.

1.3.1. General objectives

The general objective of this study was to assess the effects of inflation on household food consumption patterns in Mongu town of Zambia.

1.3.2. Specific objectives

i. To examine how inflation affects Mongu household's food expenditure levels.

ii. To evaluate how Mongu household's food consumption habits are impacted by inflation.

iii. To assess the coping mechanism used by Mongu households to control how inflation affects their consumption of food patterns.

1.4. Research questions

i. How does inflation affect the household's food expenditure in Mongu Town?

ii. Is Mongu household's food consumption habit impacted by inflation?

iii. What coping mechanisms used by Mongu households to manage the impact of inflation on their food consumption patterns?

1.5. Theoretical framework

The cost-push and demand- pull theories are found to be relevant theoretical framework in order to understand the effects of inflation on food consumption patterns by households. John Maynard Keynes (1883-1946) emphasized that actually the increase in aggregate demand as a source of demand-pull inflation. The aggregate demand comprises of consumption, investment and government expenditures (Schumpeter, 1946). Therefore, the value of aggregate demand exceeds the value of the aggregate supply, this can result in more rapid inflation. According to demand pull theory of Keynes, monetary policies usually cause the decrease in each component of the total demand that triggers reduction of pressure demand and inflation. One of the reductions in government expenditure is tax increase and the control volume of money this process can lead to hyperinflation rate (Totonchi, 2011). While the theory cost push inflation is manly attributed by rise in the production costs, such as higher wages, raw materials, or other inputs (Egle, 1961). Egle (1961) pointed that the increase in costs is usually passed onto consumers through higher prices. In this context the household consumption pattern, the cost push-push theory suggests that the inflation may lead to higher food prices that can have the impact on household's ability to afford food (Takami, 2015).

1.6. Conceptual framework

The figure 1 below shows the conceptual framework between independent, dependent, and moderating variables for this study. To gain the conceptual understanding on the effects of inflation on household food consumption patterns. Inflation rate will serve as the independent variable, that has direct effect on dependent variables such as households' food expenditures, households' food consumption pattern and also household coping strategies.

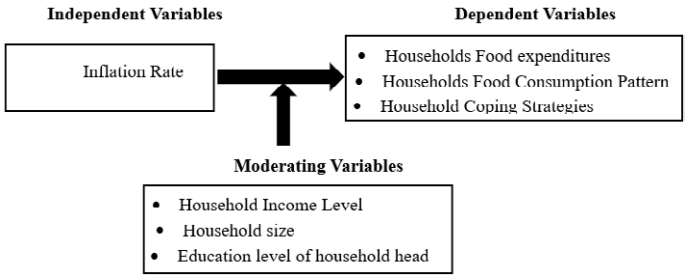

Figure 1. Conceptual framework

1.7. Justification and significance of the study

This research is significant because it analysed the effects of inflation rate on the welfare of households in Mongu and also understanding the coping alternatives mechanism that the households are putting in pace to combat the inflation rate. The findings of this research inform the government, and other stakeholders the challenges that has come with inflation on the wellbeing of people in Mongu district. Furthermore, the study results help identify the areas where households in Mongu need help from the government. Therefore, the study adheres to the guidance of scholarly inquiry of covering new trends to the effects of inflation on household food consumption patterns.

2. LITERATURE REVIEW

2.1. The effects of inflation rates on household food expenditure

The effects of inflation rates and household food expenditure levels have been a subject of interest to study. Meyirndjiui and Combes (2021) defined inflation as a sustained increase in a general price of good and services in an economy, this increase has an effect on the food consumption pattern to households. Ghasemi and Jalali (2023) assessed the effects of inflation on the expenditure and income of urban and rural families in Iran. The findings showed that inflation caused by sanctions has increased the gap between urban and rural area and, as a result, increased macroeconomic instability. Similarly, Smith and Johnson (2019) conducted a study in the United States aiming to understand how varying inflation rates influence household expenditure patterns. They found that higher inflation negatively impacts discretionary spending. The findings agreed with Gafurdjan (2024) who reviewed that there's a statistically significant inverse relationship between consumer spending and the inflation rate. While Zhang and Ou (2013) pointed out that Inflation negatively affects people's food expenditure, health and medical expenditures.

In India, Nazir and Mir (2025) found a notable and negative correlation between inflation and household consumption expenditure, stating that inflation rates increased, consumer spending tend to decrease. The study recommended that the government should maintain consistently low and stable prices (Nazir & Mir, 2025). Similarly, Jones and Peters (2020) analysed Eurostat price and expenditure data for 15 Eurozone countries (2005–2017), they reported that lower-income quintiles reduced per-capita food expenditures by up to 4 percent following spikes in food inflation, whereas top-quintile households showed negligible adjustments. Their findings emphasize distributional effects, with policy implications for targeted social assistance during inflationary episodes (Jones & Peters, 2020). Green *et al.* (2013) quantify the relation between food prices and the demand for food with specific reference to national and household income levels. They pointed out that the changes in global food prices have a greater effect on food expenditure and consumption in lower income countries and in poorer households within countries (Green *et al.*, 2013).

Burke and Ozdagli (2023) offers mixed results concerning the relationship between inflation expectations and consumption, using qualitative measures of readiness to spend. Their study finds that durables spending increases with expected inflation only for selected types of households while non-durables spending did not respond to expected inflation (Burke & Ozdagli, 2023). The study concluded that the results implied a limited stimulating effect of inflation expectations on aggregate consumption. Headey and ecker's (2013) conducted the study to differentiate exogenous fluctuations in international food commodity prices passed through to domestic markets. The results demonstrated that a percent increase in world food prices translates to a 0.8 percent increase in local food inflation, which subsequently reduced the per-capital dietary availability. Adjemian *et al.* (2024) investigated the Factors affecting recent food price inflation in the United States. findings disclosed that although supply-side factors explain most of the observed price changes, the demand-side factors, particularly the money supply had a stronger correlation with recent food price increases due to Russia's invasion to Ukraine than previously. Olufemi-Phillips *et al.* (2024) found that rising inflation correlates with higher food prices, while disproportionately affecting the low-income households and vulnerable populations. Headey and Ruel (2023) explores the potential impacts of food inflation on wasting and stunting among 1.27 million pre-school children from 44 developing countries. The finding revealed that on average, a 5 percent increase in the real price of food, the risk of wasting rise by 9 percent while the severe wasting increased by 14 percent. Headey and Ruel (2023) stated that these risks applied to food young infants on prenatal pathway and to older children who typically experience a deterioration in diet quality in the wake of inflation. Furthermore, the study disclosed that actually Male children and children from poor and rural areas households were more severely affected.

Olusola *et al.* (2022) reported that inflation had a negative significant effect on private consumption expenditure in Ghana, while interest rate and gross domestic product rate had positive significant effects. Tokoya *et al.* (2022) found a direct and significant relationship between household consumption expenditure and income in Nigeria, while inflation showed an indirect relationship. Michel (2020) reported an average

elasticity of real food expenditure to food price inflation of -0.75 in Sub-Saharan Africa, with greater responsiveness in low-income countries and urban settings. In contract, Akça (2025) evaluated the effect of inflation on household expenditures in public and private banks in Türkiye. The findings indicated that there is no symmetric causal relationship between inflation rates and household expenditures (Akça, 2025).

Equally, Raihan *et al.* (2023) investigated how the recent inflationary pressure affected the livelihoods of low-income households in Bangladesh. The study revealed that the average monthly household income in Bangladesh did not increase significantly, while the monthly national average food expenditure increased. In Nigeria, Kassy *et al.* (2021) identified factors influencing food security status as wealth index, belonging to a cooperative society, lack of money to buy food items, and the number of accessible marketplace affecting households in Enugu state, Nigeria. In Zambia, Mwale and Kabubi (2025) investigate the inflation and its effects on household situation in Mitengo, Ndola. They found a statistically significant relationship between inflation perception and budgeting adjustments (Chi-Square = 14.090, p = 0.000).

Chileya *et al.* (2024) empirical analyzed the relationship between monetary policy and food inflation in Zambia within the time period of the first quarter of 2016 to the second quarter of 2023. The results postulate that there was a statistically relationship between monetary policy and food inflation. Furthermore, the study revealed that depreciation in the domestic currency to foreign currency increased food inflation in the long run (Chileya *et al.*, 2024). Similarly, ng'ombe and chola (2018) found that real food expenditure fell by 5-8% in Zambi, 7-10% in Malawi and 9-12% in Zimbabwe for every 10% rise in food price index.

Bwalya *et al.* (2023) conducted a study to examine the association of minimum dietary diversity, minimum meal frequency, and minimum acceptable diet with measures of household food security such as household dietary diversity score, and food insecurity experience scale, while controlling for confounding variables. The results show that children living in households classified as being food-secure based on the household dietary diversity score were significantly more likely to achieve appropriate feeding practices on all three IYCF measures, even after controlling for confounding factors (Bwalya *et al.*, 2023). Chileshe and Mwansa (2019) found that food expenditure shares increased from 42% for the lowest income quintile to 52% for the middle quintile and declined slightly for the top quintile in Lusaka, indicating Engel's law behavior under stable inflation.

2.2. The effects of inflation rate on food consumption pattern

The link between food price shocks and household consumption is widely studied in the literature. Minot (2009) points out that food price instability is problematic for households if it negatively affects their consumption. This point aligns with the results found by Combes *et al.* (2014). Arezki and Bruckner (2011) using a large panel data of 120 countries covering the period 1970 – 2007, shows that food price shocks negatively affect private consumption when increasing income and consumption inequality (Arezki & Bruckner, 2011). This was certainly a serious threat to food security, especially for low-income households who spend larger proportions of their budgets on food needs (Mitchell, 2008; World Bank, 2019). In the same vein, based on survey data from Ethiopia between 2004 and 2008, Alem and Soderblom (2012) established that larger food price shocks lead to decreased household consumption in Ethiopia, especially among households in the informal sector or with weak assets.

A meta-analysis by Green *et al.* (2013) involving 162 countries found that a one-percentage increase in cereal prices lowers food consumption by about 0.61 percent, with the poorest households being most affected. This was consistent with Engel's Law, which indicates that lower-income households allocate a larger share of income to food, making them disproportionately affected by food price inflation (Engel, 1857). Meyimdjui and Combes (2021) found that fiscal policy can mitigate the adverse effects of import food price shocks on household consumption through government subsidies and transfers. Households worldwide face significant challenges in maintaining their food consumption patterns during periods of inflation (Jones & Peters, 2020). As prices rise, households must adjust their consumption habits to cope with reduced purchasing power (Michel, 2020).

Households adjust their food consumption patterns in response to inflation by reducing meal frequency, shifting to less nutritious food, or depending on informal credit (Katona, 1975). Nadu (2015) examined the impact of food inflation on household consumption patterns among Below Poverty Line (BPL) and Above Poverty Line (APL) households in Kannur District. He found that households reduced consumption of essential food items, including fruits, meat, and dairy products, in response to rising prices (Nadu, 2015). Saha and Kar (2024) found that households in India reduced consumption by less than 30 percent in response to price rises, with low-income households being more affected. The impact of inflation on household consumption patterns varies across contexts.

Molnár and Hajdú (2023) examine the trends in the food purchasing habits for the above 18 years of age population of a county of Hungary. The findings confirm a decrease in both supermarket visits and the level of consumption of fresh products including vegetables, fruits, dairy products, and baked goods due to high inflation and rising food costs. Additionally, Molnár and Hajdú (2023) notice a shift towards shopping at discount supermarkets, accompanied by a decline in both bulk and small purchases. As spending on food has increased by over 40%, consumers are increasingly mindful of their spending. Inflation can influence household consumption patterns in various ways. According to Katona (1975), inflation affects consumer spending both directly and indirectly. Directly, inflation reduces the purchasing power of consumers, while indirectly, it influences their expectations and behavior's.

Studies have consistently shown that inflation has a significant impact on household expenditure and consumption patterns. Sulekha *et al.* (2019) found that inflation reduces household spending power, particularly for those with fixed incomes, and increases the cost of living and prices of commodities. Raihan *et al.* (2023) observed a significant increase in living costs for low-

income households in Bangladesh, with monthly average food expenditure increasing by 17.2% and non-food expenditure by 5.8%. Tokoya *et al.* (2022) found a direct and significant relationship between household consumption expenditure and income in Nigeria. Nyambe and Kanyeumbo (2015) noted a positive relationship between economic growth, government expenditure, household food expenditure, and inflation in Namibia. In Zambia, Funjika *et al.* (2022) examines the effect of fuel prices on inflation in Zambia using monthly data from January 2016 to December 2024. Fuel prices are found to impact inflation both in the short and long-run. Inflation is also influenced by the exchange rate, world food prices, monetary policy rate and imported inflation from South Africa, a major trading partner of Zambia. The results emphasised the multi-faceted nature of inflation and suggest that measures to control inflation should mostly involve a policy-mix.

2.3. The coping strategies by households on inflation rate effect

Seivwright *et al.* (2024) examined the Increasing severity of food insecurity is associated with the number and types of household financial strategies used to cope with inflation in Tasmania. The study identified five strategies such as, reducing food quantity and quality, reducing housing and transport costs, drawing on assets, savings and credit, reducing insurance costs and reducing discretionary expenditure. Seivwright *et al.* (2024) also demonstrated that the use of coping strategies increased significantly with each categorical increase in food insecurity for each strategy except reducing insurance costs, in which increases became significant at moderate food insecurity. Islam *et al.* (2022) found that coping mechanisms adopted by households varied according to demographic characteristics, and the QoL deteriorated significantly more in those households that adopted more coping mechanisms relative to others, regardless of socio-demographic features.

Raihan *et al.* (2023) investigated how the recent inflationary pressure affected the livelihoods of low-income households in Bangladesh, as well as their coping mechanisms and outlooks for the future. The study reveals that households employed various coping strategies such as changing food habits, reducing non-food expenditures, using savings, borrowing, relying on aid, selling properties and durable goods, working overtime, involving in secondary occupations, discontinuing child education, involving children in paid work, and migration (Raihan *et al.*, 2023). Similarly, Anwar *et al.* (2024). examine the impact of various coping strategies on household food insecurity in Pakistan. The findings suggested that a household that used coping strategies amid crisis was a vulnerable household and more likely to have food insecurity status.

Ouinton *et al.* (2024) examine the changes in the types and severity of coping mechanisms for food insecurity resulting from the food price shock caused by the oil price crash, currency devaluation, and restrictions on foreign exchange. The Findings indicate a rise in the percentage of Nigerian households grappling with food insecurity from 2015 to 2018. During this period, 68.7% of households resorted to at least one coping mechanism, 31.8% adopted six or more coping strategies, and 43.2% resorted to severe coping strategies. A study in West Africa found that households shifted to cheaper food options, such as cassava and plantains, in response to price increases (Haggblade *et al.*, 2017). Martinčić *et al.* (2022) describe these coping strategies as strategic plans to deal with food unavailability made by households at risk of food insecurity.

Ulimwengu (2025) investigated the household coping strategies and food security outcomes within the context of multiple, overlapping shocks, including conflict, food price volatility, climate events, and economic instability in Mali. The key findings demonstrate that while preventive measures, such as income diversification, strengthen resilience, reactive strategies like selling productive assets or borrowing money or food provide only short-term relief but undermine long-term sustainability. Amendah *et al.* (2014) showed the most frequently used strategy was related to reduction in food consumption, followed by the use of credit, with and of households reported used these strategies respectively. Abiodun *et al.* (2022) The study recommended among others are that the government should adequately put in place policy frameworks aimed at reducing the cost of production and increasing supply of local rice should be pursued as this will also invariably enhance demand for local rice by households as rice was estimated to be own-price inelastic.

3. METHODOLOGY

3.1. Research designs

The study employed a mixed-methods research design combining both qualitative and quantitative methods. This research design was deemed suitable for this investigation because it enables a comprehensive and detailed description of the phenomenon under study, thereby provided a nuanced understanding on the specific context in which households in Mongu town experienced the impacts of inflation on their food consumption patterns, ultimately arrived at a conclusive statement that were used to generalized to the population under observation.

3.2. Target population

The target population was few households in Mongu town, specifically from four residential areas, namely; Imwiko, Boma Area, North Park and Namboard, where the low, middle and highly-income people live, respectively (CSO Census, 2022).

3.3. Sampling design

A sampling technique was employed to select units of the sample (Bryman, 2008). The study utilized both simple and stratified random techniques. The sampling frame was obtained from the Zambia statistics agency. The simple random sampling was employed to select a random sample of household. While the strata were used based on income levels (low, middle, and high).

3.4. Sample size determination

The sample size of the 90 respondents was used during data collection. A sample is a small amount of anything that you can try or examine. Bless and Smith (1995) define sample as a subset of elements taken from a population which is considered to be representative of the population.

3.5. Data collection methods

This study collected primary data for analysis. Primary data was collected using self-administered questionnaires and focused groups. The semi-structured questionnaire with both close ended and open-ended questions were used. Kombo and Tromp (2006) indicate that semi-structured questionnaire refers to the use of already prepared questions during the study.

3.6. Data analysis

The study employed both qualitative and quantitative data analysis methods. Quantitative data were analysed using Megastat, generating graphs and charts, this approach allowed for a comprehensive understanding of the data, facilitating aggregation and trend identification.

4. RESULTS AND DISCUSSION

4.1. Background characteristics

4.1.1. Residential area

Table 1 below represents a total of 90 respondents from 4 different residential areas of households in Mongu town represented at 100%. Namboard had the least presentation of 16.7% (15), followed by Boma area with 20% (18) while North Park had 27.8% (25) and Overspill had the highest represented with 35.6% (32) respondents. This disparity in representation could be indicative of differences in socioeconomic characteristics, access to resources, or demographic profiles of households across these residential areas. In contrast, households in more established areas like North Park may have better access to markets, services, and economic opportunities, enabling them to maintain a more stable food security situation.

Table 1. Residential area

Residential Area		
	frequency	**percent**
Imwiko	32	35.6
Boma Area	18	20.0
North Park	25	27.8
Namboard	15	16.7
	90	100.0

4.1.2. The cross-tabulation of age and gender

The cross-tabulation of age and gender in table 2 below reveals interesting patterns among the 90 respondents. In terms of age distribution, the majority fell within the age range of 31-40 years with 39 respondents among them 23 were male and 13 females, followed by those above 50 years with 22 respondents with 17 male and 5 females, while 23 respondents were in the age range between 41-50 years with 8 male and 15 females. The 21-30 years age group had the least number of respondents of 9 with 6 male and 3 females. Notably, there were no respondents below the age of 20. In terms of gender, males dominated the sample, accounting for 60% (54) of the respondents, while females accounted for 40% (36).

Table 2. The cross-tabulation of age and gender

Age of the Respondent	Gender of the Respondent		Total
	Male	**Female**	
below 20	0	0	0
21 - 30 years	6	3	9
31 - 40 years	23	13	36
41 - 50 years	8	15	23
above 50 years	17	5	22
Tota	54	36	90

4.1.5. The education level and household income of the respondents

Table 3 below, is a representation of the respondents according to education level and income per month. The findings show the distribution of educational levels across four income groups (below k2,499, K2,500 – k4,999, K5,000 – k10,000, above k10,000) among 90 respondents. The largest income group of respondents was in the income range between k5,000 to k10,000, with 45 respondents representing 50%, followed by 24 were in the income range (K2,500 – k4,999) representing 26.67%, 12 were in the income range above k10,000 representing 13.33% and 9 were in the income range below k2,499 representing 10%. Tertiary education had the highest number of respondents with 40(44.44%), particularly among those in income range of K5,000 – k10,000. Secondary education followed closely with 34(37.78) respondents, while primary education account for 16 respondents (17.78%). Overall, households with the income range of (K5,000 – k10,000) had the highest educational attainment, with a significant number of tertiary-level respondents.

Table 3. Education level and income of the respondents

Level of education	What is your household income per month?				
	Below k2,499	**2,500 - k4,999**	**k5,000 - k10,000**	**Above k10,000**	**Total**
Primary	7	4	3	2	16
Secondary	2	15	12	5	34
Tertiary	0	5	30	5	40
Total	9	24	45	12	90

4.1.6. Respondents according to the size of household

Table 4 below show the distribution of respondents according to household size. The respondents were asked to indicate the number of people living in their household, and the results show that, the majority of respondents represented by 60% (54), reported having a household size of 4-7 people, followed by 22.2% (20) with a household size of 1-3 people, and the smallest proportion, 17.8% (16), had a household size of more than 8 people.

Table 4. The size of household.

How many people live in your household?		
	frequency	**percent**
1 - 3 people	20	22.2
4 - 7 people	54	60.0
Above 8 people	16	17.8
	90	100.0

4.2. The effects of inflation rates on household food expenditure in mongu

4.2.1. Household food expenditure change in the past year due to inflation

Table 5, below represents the respondents according to the household food expenditure change in the past year due to inflation. 90% (81) of the respondents clearly indicated that the food expenditure increased, while 8.9% (8) indicted that their household food expenditure remained the same and only 1 indicated that the food expenditure decreased due to the inflation for the past year.

Table 5. Household food expenditure change

How has your household food expenditure changed in the past year due to inflation?		
	frequency	**percent**
Increased	81	90.0
Decreased	1	1.1
Remained the same	8	8.9
	90	100.0

4.2.2. Cross-tabulation: Changes in food prices and household budget adjustments

The distribution of respondents according to changes in food prices over past year and review and adjust your household budget to accommodate inflation is presented in Table 4.2 below. The majority of respondents, 89 out of 90, had noticed changes in food prices over the past year, with 51 responding by reducing consumption and 38 maintaining consumption despite price increases. In terms of budget management, most respondents, 67, reviewed and adjusted their household budget on a monthly basis, while 21 do so rarely, and 1 reviewed both daily and weekly respectively. Notably, among those who noticed price increases, reducing consumption was a more common strategy adopted by 51 respondents, compared to maintaining consumption adopted by 38 respondents and only 1 respondent who never experienced priced changed to due to inflation.

Table 6. Changes in food prices and household budget adjustments

Have you noticed any changes in food prices over the past year? If yes, how have you adjusted your food expenditure?	**How often do you review and adjust your household budget to accommodate inflation?**				
	Daily	**Weekly**	**Monthly**	**Rarely**	**Total**
Yes, prices have increased, and we have reduced consumption	1	1	41	8	51
Yes, prices have increased, and we have maintained consumption	0	0	25	13	38
No, prices have not changed	0	0	1	0	1
Others (please specify)	0	0	0	0	0
Total	1	1	67	21	90

4.2.3. Regression Analysis for household size and monthly household food expenditure.

The regression analysis in table 7 below examines the relationship between household size and average monthly household food expenditure per month. The study's findings reveal a significant positive relationship between household size and average monthly household food expenditure. According to the regression analysis, for every additional person in the household, food expenditure increases by approximately 0.4615 units ($p = 0.0003$). Although household size explains only 13.9% of the variation in food expenditure (R-squared = 0.139), the relationship is statistically significant. The ANOVA test confirms the model's significance ($F = 14.21$, $p = 0.0003$), indicating that household size is a crucial factor in determining food expenditure. Notably, larger households tend to have higher food expenditure. Moreover, the study found a moderate linear relationship between the perception of inflation's impact on food expenditure and actual changes in food expenditure (Pearson correlation coefficient, $r = 0.373$), suggesting that inflation significantly increased household food costs.

Table 7. Regression analysis

Regression Analysis						
	r^2	0.139	n	90		
	r^2	0.373	k	1		
	Std. Error	**0.733**	**Dep. Var.**	**monthly household food expenditure**		
ANOVA Table						
Source	**SS**	**Df**	**MS**	**F**	**P-value**	
Regression	7.6308	1	7.6308	14.21	.0003	
Total	54.9000	89				
Regression output					**confidence interval**	
variables	**coefficients**	**std. error**	**t (df=88)**	**p-value**	**95% lower**	**95% upper**
Intercept	1.7308	0.2516	6.879	8.44E-10	1.2307	2.2308
Household Size	0.4615	0.1225	3.769	.0003	0.2182	0.7049

4.2.4. A Chi-square test for inflation effects and household food expenditure

The cross-tabulation table 8 below examines the relationship between two variables: whether the household's food expenditure has been affected by inflation and how the household's food expenditure has changed in the past year due to inflation. The table shows that out of 90 households, 83 reported that their food expenditure has been affected by inflation, with 78 of them experiencing an increase in food expenditure. Additionally, the cross-tabulation table reveals also that households that reported being affected by inflation overwhelmingly experienced an increase in food expenditure (78 out of 83 households). The chi-square test results indicate a statistically significant association between the two variables, with a Pearson chi-square value of 21.8417 and a p-value of 0.000. Since the p-value is less than the typical significance level of 0.05, the null hypothesis is rejected. This suggests that there is a significant relationship between the perception of inflation's impact on food expenditure and the actual change in food expenditure, indicating that inflation has had a significant impact on household food expenditure, leading to increased costs for many households.

Table 8. chi- square for inflation effect and household food expenditure

Do you think your household's food expenditure has been affected by inflation more than other expenses?	**How has your household food expenditure changed in the past year due to inflation?**			
Yes	**Increased**	**Decreased**	**Remained the same**	**Total**
No	78	1	4	83
Total	3	0	4	7
	81	1	8	90
	21.84 chi-square			
	2 df			
	0.00 p-value			

4.3. The effects of inflation rate on food consumption pattern in mongu

4.3.1. Shows types of food household consumed

Table 9 below is a representation of the respondents according to the type of food household typically consume. The data shows that households had varying dietary patterns, with 36.7% (33 households) relying solely on staple foods like maize and millet. Meanwhile, 25.6% (23 households) consume staple foods with fruits and vegetables, 21.1% (19 households) had a diverse diet including staple foods, protein sources, and fruits, and 16.7% (15 households) consume staple foods with protein sources.

4.3.2. Changes in food consumption patterns due to inflation

When the respondents were asked whether they have changed their food consumption patterns due to inflation? And if yes, how? The results in table10 below reveals that 63.3% of households (57 households) had changed their food consumption patterns due to inflation by consuming more staple foods, likely as a cost-saving measure. In contrast, 10% of households (9 households) reported consuming more expensive foods, possibly due to other factors influencing their food choices. Meanwhile, 26.67% of households (24 households)

Table 9. Shows types of food household consumed

What types of food do you typically consume in your household?		
	frequency	**percent**
Staple foods, Protein sources & Fruits and vegetables	19	21.1
Protein sources (e.g., meat, fish)	0	0.0
Fruits and vegetables	0	0.0
Staple foods (e.g., maize, millet)	33	36.7
Staple foods & Protein sources.	15	16.7
staple foods & Fruits and vegetables	23	25.6
Protein sources & Fruits and vegetables	0	0.0
	90	100.0

Table 10. Changes in food consumption patterns due to inflation

Have you changed your food consumption patterns due to inflation? If yes, how?		
	frequency	**percent**
Yes, we consume more staple foods	57	63.3
Yes, we consume more expensive foods	9	10.0
No, our food consumption patterns have not change	24	26.7
Others (please specify)	0	0.0
	90	100.0

reported no change in their food consumption patterns, suggesting that they had been less affected by inflation or they had other coping mechanisms in place.

4.3.3. A chi-square test of inflation and household's nutritional intake

Based on the data, Pearson chi = 75.09 p-value = 0.00 setting the level of significance to 0.05. The cross-tabulation in table 11 below show the findings that inflation had significantly impacted households' nutritional intake, with 67 households reporting an effect. Among those who reported an effected, 32 households no longer consume a balanced diet, 21 households shifted to cheaper and lower-quality food options , and 14 households increased consumption of unhealthy foods. while 23 households resorted that inflation had not impacted their nutritional intake. Interestingly, even among households that reported no impact, some still experienced negative effects, such as reduced consumption of essential nutrients by 2 households, shifting to cheaper food options by 1 household. The chi-square test statistic of 75.09 with 3 degrees of freedom, and the p-value of 0.00, which is less than the significance level of 0.05. Therefore, we reject the null hypothesis that inflation and household nutritional intake are not independent. We conclude that there is a statistically significant association between inflation and household nutritional intake. The findings suggest that inflation had led to a shift towards cheaper, lower-quality food options, which can have negative implications for household nutrition and health.

4.3.4. A chi-square test on income and quantity of food consumed by households

As shown in table 12 below, based on the data, Pearson chi = 15.38 p-value = 0.0175 setting the level of significance to 0.05. The findings examine the relationship between

Table 11. A chi-square test of inflation and household's nutritional intake

Do you think inflation has affected your household's nutritional intake?		If yes, how has inflation affected your household's nutritional intake?				
		We are no longer consuming balanced diet and we have Reduced consumption of essential nutrients (e.g fruits)	**Increased consumption of unhealthy foods**	**Shift to cheaper, lower quality food options**	**Shift to cheaper, lower quality food options**	**Total**
Yes	Observed	32	14	21	0	67
	Expected	25.31	10.42	16.38	14.89	67.00
No	Observed	2	0	1	20	23
	Expected	8.69	3.58	5.62	5.11	23.00
Total	Observed	34	14	22	20	90
	Expected	34.00	14.00	22.00	20.00	90.00
		75.09 chi-square 3 df 0.00 p-value				

the household income per month and the quantity of food consumed in the past year among 90 households. The data shows that households with lower incomes (Below K2499 and K2500-K4999) are more likely to have decreased their food consumption, with 7 out of 9 households and 17 out of 24 households, respectively, reporting a decrease. In contrast,

households with higher incomes (K5000-K10000 and Above K10000) are more likely to have maintained or increased their food consumption. The chi-square test (Pearson chi2(6) = 15.38, Pr = 0.0175) confirms a statistically significant association between household income and changes in food consumption patterns, as the p-value (0.00175) is less than the significance level of 0.05. therefore, the null hypothesis (H_0) is rejected, suggesting that household income and quantity of food consumed by households are not independent. The high cost of living in the city, coupled with inflation, had been found to affect them seriously. This implies that income level is a critical factor influencing food security and food consumption patterns, with lower-income households being more likely to reduce their food intake.

Table 12. A chi-square test table

What is your household income per	How has the quantity of food consumed in your household changed in the past year due to inflation?			
	Increased	Decreased	Remained the same	Total
Below k2,499	2	7		9
k2,500 - k4,999	6	17	1	24
k5,000 - k10,000	9	28	8	45
Above k10,000	5	2	5	12
Total	22	54	14	90
	15.38 chi-square 6 df .0175 p-value			

4.3.5. A chi-square test on change in diversity and the quantity of food consumed

The findings in table 13 below explore the relationship between Change in the diversity and the quantity of food consumed among the 90 households. The data shows that 60 respondents reported consuming a more limited variety of foods, with 59 households noticed changes both in diversity and in the quality or quantity of food consumed and 1 reported no change in the quantity consumed. 11 out of 17 households noticed both changes in diversity and in the quality or quantity of food consumed yet consuming a more diverse variety of foods, with 6 reported experiencing change in diversity yet noticed no change in the quality or quantity of food consumed.

Lastly, 6 out of 13 households reported changes in food quantity also reported no change in dietary diversity, while 7 reported experiences neither diversity nor quantity consumed. In total, 76 households reported changes in food quantity, while 14 households reported no changes. The Pearson chi-square test statistic (28.36) and the corresponding p-value (0.00) indicate a highly statistically significant association between changes in food quantity and diversity, as the p-value (0.00) is less than the significance level of 0.05. therefore, the null hypothesis (H_0) is rejected. This suggests that households that experience changes in food quantity are more likely to also experience changes in food diversity, specifically consuming a more limited variety of foods.

The study's findings further suggest that inflation has led to a decline in dietary quality, with many households compromising on nutrition to cope with rising prices. The data shows that 60 households reported consuming a more limited variety of foods. Refer to Table 13 below.

Table 13. A Chi-square test on diversity of food consumed

Have you noticed any changes in the quality or quantity of food you consume due to inflation	Have you noticed any changes in the diversity of food consumed in your household due to inflation? If yes, how?			
	Yes, we consume a more limited variety of foods	Yes, we consume a more diverse variety of foods	No, the diversity of food consumed has not changed	Total
Yes	59	11	6	76
No	1	6	7	14
Total	60	17	13	90
	28.36 chi-square 2 df 0.00 p-value			

4.4. The coping strategies by households on inflation rate effect in mongu

4.4.1. Coping strategies employed to manage effects of food price inflation in mongu

Table 14 below shows the coping strategies employed by 90 households to manage the effects of food price inflation. The most common strategy was reducing non-essential expenses and substituting expensive foods with cheaper alternatives, employed by 27 households representing 30%. The second most common strategy was a combination of reducing non-essential expenses, substituting expensive foods with cheaper alternatives, and borrowing food or money from others, used by 20 households representing 22.22%. The third most common strategy was increasing income, such as taking on extra work and venturing into a business, employed by 11 households representing 12.22%. Other notable coping strategies include reducing non-essential expenses and borrowing food or money from others, increasing income and substituting expensive foods with cheaper alternatives, and substituting expensive foods with cheaper alternatives and borrowing food or money from others. Each of these strategies was employed by 2 households (2.22%). Some households also employed less common strategies, such as reducing non-essential expenses, increasing income, and substituting expensive foods with cheaper alternatives (1 household, 1.11%), and borrowing food or money from others (1 household, 1.11%). The least common coping strategy is increasing income and borrowing food or money from others, which was not employed by any households.

Table 14. Coping strategies employed to manage effects of food price inflation in mongu

What coping strategies has your household employed to manage the effects of food price inflation?		
	frequency	**percent**
Reducing non-essential expenses	5	5.6
Increasing income (e.g., taking on extra work)	11	12.2
Substituting expensive foods with cheaper alternatives	8	8.9
Borrowing food or money from others	1	1.1
Reducing non-essential expenses, increasing income (e.g., taking on extra work), Substituting expensive foods with cheaper alternatives and Borrowing food or money from other	1	1.1
Reducing non-essential expenses, increasing income (e.g., taking on extra work) and substituting expensive foods with cheaper alternatives.	6	6.7
Reducing non-essential expenses, substituting expensive foods with cheaper alternatives and Borrowing food or money from others	20	22.2
Reducing non-essential expenses and Increasing income (e.g., taking on extra work)	5	5.6
Reducing non-essential expenses and substituting expensive foods with cheaper alternatives	27	30.0
Reducing non-essential expenses and Borrowing food or money from others	2	2.2
Increasing income (e.g., taking on extra work) and substituting expensive foods with cheaper alternatives	2	2.2
Increasing income (e.g., taking on extra work) and Borrowing food or money from others	0	0.0
Substituting expensive foods with cheaper alternatives and Borrowing food or money from others	2	2.2
	90	100.0

4.4.2. Changes in shopping habits due to inflation

When respondents were asked if they had changed their shopping habits due to inflation and if yes how. The data in table 15 below reveals that a significant majority of households had changed their shopping habits due to inflation, with 37(41.1%) households shopping less frequently for non-essentials and 32(35.6%) households shopping more frequently for essentials, indicating that households are prioritizing essential expenses and managing their budgets accordingly. Additionally, 13(14.4%) households reported looking for discounts and promotions, highlighting price-conscious behavior. Only 8(8.9%) households reported no change in shopping habits, suggesting that most households had been impacted by inflation and have made adjustments, adapting by prioritizing essentials, reducing non-essential spending, and seeking value-for-money opportunities.

Table 15. Changes in shopping habits due to inflation

Have you changed your shopping habits due to inflation? If yes, how?	frequency	percent
Yes, we shop more frequently for essentials	32	35.6
Yes, we shop less frequently for non-essentials	37	41.1
Yes, we look for discounts and promotions	13	14.4
No, our shopping habits have not changed	8	8.9
	90	100.0

4.4.3. Reduction in non-food expenditure

When the respondents were asked if they had reduced non-food essentials to prioritize food expenditure and if yes, what non-food expenditure have they reduced among 90 households. The data in table 16 below indicates that a significant majority of 74 households had reduced non-food expenditure to prioritize food spending, with the most common reductions being cancellation of subscription services like DSTV by 26 households and reduction in buying clothing/entertainment expenditure by 22 households. Additionally, 16 households shifted their children's education from private to government schools, and 10 households moved to cheaper housing.

Table 16. Reduction in non-food expenditure

Have you reduced your non-food expenditure to prioritize food expenditure	If yes, what non-food expenditure have you reduced					
	Reduction in clothing/entertainment expenditure	Cancellation of subscription services (e.g dstv) and transportation	Removing children from private school to government school	Shifting from expensive hous to cheap houses	Nothing at all	Total
Yes	22	26	16	10	0	74
No	0	0	0	0	16	16
Total	22	26	16	10	16	90

4.4.4. Assistance programs or forms of support to cope with inflation

The respondents were asked if rely on any food assistance programs or other forms of support to cope with inflation and if yes what food assistance programs or support do you rely on. The cross-tabulation table 17 below reveals that 21 out of 90 households rely on food assistance programs or support to cope with inflation, while 69 households do not. Among those who rely on assistance, the most common programs were the Social Cash Transfer Scheme with 10 households, followed by Food Security Packs with 6 households, and Drought Assistance Program with 5 households. Notably, no households that rely on assistance reported receiving "Nothing at all", indicating that respondents who selected "Yes" to relying on assistance did specify a particular program.

Table 17. Assistance programs or forms of support to cope with inflation

Do you rely on food assistance programs or other forms of support to cope with inflation	If yes, what food assistance programs or support do you rely on				
	Nothing at all	Social cash transfer scheme	Food security packs	Drought assistance program	Total
Yes	0	10	6	5	21
No	69	0	0	0	69
Total	69	10	6	5	90

4.4.5. Coping strategy preferences for managing food price inflation

The cross-tabulation data in table 18 below findings reveal that a significant majority of respondents (51 out of 90) believe that there were more effective coping strategies for managing the effects of food price inflation beyond what they are currently using. Among those who believe alternative strategies were needed, government subsidies with 26 respondents and food assistance programs with 7 respondents were identified as potential effective coping strategies. Additionally, 8 respondents suggest income support, while 4 respondents each propose price controls and capital empowerment. Notably, 2 respondents who believe that there were more effective coping strategies for managing the effects of food price inflation

stated that current strategies are sufficient. In contrast, 23 respondents do not think alternative strategies were necessary, with 15 of them believing that current strategies are sufficient while 8 believed that capital empowerment would be an effective strategy. Furthermore, 16 respondents are unsure about the effectiveness of alternative strategies, with 12 of them suggesting food assistance programs as a potential option and 4 think government subsidies as better option. Overall, the findings highlight the need for innovative and context-specific strategies to address food price volatility, with government subsidies and food assistance programs emerging as potential effective coping strategies.

Table 18. Coping strategy preferences for managing food price inflation

Do you think there are any other coping strategies that would be more effective in managing the effects of food price inflation	What type of coping strategy do you think would be more effective in managing the effects of food price inflation? (Select one)						
	Government subsidies	Price controls	Food assistance programs	Income support	Other (please specify) capital empowerment	None, current strategies are sufficient	Total
Yes	26	7	4	8	4	2	51
No	0	0	0	0	8	15	23
Unsure	4	0	12	0	0	0	16
Total	30	7	16	8	12	17	90

4.4.6. A chi square test on effectiveness of coping strategies and education level

The cross-tabulation examines the relationship between the effectiveness of coping strategies in managing inflation and education level among 90 respondents. The data in table 19 below shows that 11 respondents find the strategies to be very effective, with 1 reported to had have primary as highest level of education, while 4 secondary and 6 Tertiary level. 25 respondents think they were somewhat effective, with 3 indicated that primary was their highest level of education, while 14 with secondary and 8 Tertiary level. Further, 39 believe the coping strategies were not very effective, with 7 reported Primary as their highest level of education, 14 secondary and 18 gone up to Tertiary level. 15 find them to be not at all effective in managing food inflation, with 8, indicated that primary was their highest level of education, while 2 with secondary and 5 Tertiary level. Based on the data, Pearson chi2 (6) = 9.01 p-value = 0.1732. setting the level of significance to 0.05. Since the p-value is greater than 0.05. Therefore, we fail to reject the null hypothesis, suggesting that there is no statistically significant relationship between education level and perceived effectiveness of coping strategies in managing inflation. This finding suggests that the effectiveness of coping strategies is likely perceived similarly across different education levels.

Table 19. A chi-square test

What is your highest level of education	How effective do you think these coping strategies have been				
	Very effective	Somewhat effective	Very effective	Not at all effective	Total
Primary	1	3	7	5	16
Secondary	4	14	14	2	34
Tertiary	6	18	18	8	40
Total	11	25	39	15	90
	9.01 chi-square 6 df .1732 p-value				

4.5. Discussion of the findings

4.5.1. The Effects of inflation rates on household food expenditure in Mongu

The results of the study on effects of inflation on household food expenditure on household in Mongu showed that the inflation had increased the food expenditure with 90% indicated that their household's food expenditure increased because of rise in prices of goods and services, while 8.9% indicated that the food expenditure did not increase rather remained the same and only 1.1% indicated actually that the food expenditure decreased due to the inflation for the past year. According to the findings it was observed that majority of the households experienced the rise in food expenditures that resulted on the households to increased their food consumption expenditure. This means that inflation influenced the expenditure patterns for mongu households. The above finding agrees with the findings of smith and Johnson (2019) who found that inflation has a varying influence on household expenditure patterns.

The cross-tabulation of changes in food prices and household budget adjustments revealed that 89 out of 90 households observed the change in food prices over the past year, with 51 responded by reducing consumption while 38 maintained the consumption despite the price increases. Furthermore, 67 mentioned that they reviewed and adjusted their household budget on a monthly basis, while do so rarely, and 1 reviewed both daily and weekly. The findings mean that many of the households were affected by changes in price that led to household to adjust and change their budgetary habit, some reported reviewing the budget every month which result to households not to plan adequately and also people became uncertain about the price, hence caused people to buy in advance in fear of goods become more expensive than it was. The research findings concurred with the study of Raihan *et al.* (2023) in Bangladesh who found that both monthly average food expenditure and monthly non-food expenditure raised over 6 months with higher increase observed in urban areas on food expenditure and in rural areas. Therefore, the findings confirms that households experience an increase in the cost of living by the inflation.

The regression analysis revealed a statistically significant relationship between household size and average monthly household food expenditure will F-value of 14.21 and p-value =0.0003. according to the regression analysis, for every additional person in the household, the household food expenditure increases by approximately 0.465 units. The findings above suggest that the number households were found to be the critical factors in determining the household's food expenditure. Meaning the households with large families were more affected by inflation than those who had small size of households The finding agrees with existing literature, which suggests that household size is an important factor in determining food expenditure (Chisanga & Zulu-Mbata, 2018). Furthermore, chi-square test for inflation effects and household food expenditure revealed the significance association between the two variables with the chi-square values 21.84 and p-value of 0.000. This finding suggests that there is significant a relationship between perception effect of inflation on food expenditure and the actual change in food expenditure. This means that food expenditure for the households in Mongu were affected by inflation, leading to increase in cost of many households. Therefore, the consequences of inflation effects to household may that many households would be experiencing food insecurity or struggling to afford nutritious food. The finding aligns with the findings of Olusola *et al.* (2022) who found a cointegration relationship between the food expenditure and inflation rate.

4.5.2. The effects of inflation rate on food consumption patterns in Mongu

The findings on the effects of inflation to food consumption patterns among the household in Mongu shows that households had varying dietary patterns, with 36.7% rely on staple foods such as maize and millet, meanwhile, 25.6% reported consuming staple food with fruits and vegetables 21.1% had a diversity diet including staple foods, proteins source and fruits while 16.7% consume staple foods and protein sources. According to the findings above it was observed that majority of households reported changes in food quantity as result of inflation. This changes in quantity led to reduction in the diversity of food consumed by households with many households resorted to consume limited variety of foods that would be so harmful to nutritious especially to children. The findings agree with what Headey and Ruel (2023) found that young infants on prenatal pathway and to older children who typically experience a deterioration in diet quality in the wake of inflation. Furthermore, there study disclosed that actually Male children and children from poor and rural areas households were more severely affected.

The cross-tabulation for inflation and household nutritional intake results indicate that 67 households reported an effected with majority of them had stopped consuming balanced diet some shifted to cheaper food and only 23 respondents reported no effect on food expenditure. While a chi-square test statistic of 75.09 with 3 degrees of freedom, and the p-value of 0.00, which is less than the significance level of 0.05, revealed the statistically significant association between inflation and household nutritional intake. These findings suggest that actually households in mongu in response to inflation they chose to reduce the amount of food consumed and others resorted to go for cheaper and a safer food which can have negative implications on their nutrition and health.

The results also showed that households with lower incomes (below 2,499 ad k2500-k4999) were more likely to reduce the amount of food consumed in contrast the household who reported to have higher incomes (K5000-K10000 and Above K10000) maintained or increased their food consumption. The chi-square test revealed (Pearson chi-square(6)= 15.38 ,p-value 0.0175) confirms the a statistically significant association between household income and changes in food consumption patterns among the household in mongu. These findings means that inflation impacted the household who had low income more significantly than those who had high income. Therefore, the study established that actually income size is one of the factors that contribute to the effects of inflation on household food consumption.

4.5.3. The coping strategies by households on inflation rate effect in mongu

The household's in Mongu employed different coping mechanism as alternative for managing inflation effects on food consumption. The results have shown that different coping strategies were employed by households which includes reducing non-essential expenses and substituting expensive foods with cheaper alternatives employed by majority of the households some households also employed prioritizing essential expenses, borrowing food, sake for aid while some ventured in business so as to combat the effects of inflation. These coping strategies that was used by households demonstrated how households in mongu are attempting to reduce the effects of inflation on their household consumption patterns. These findings also show how difficult it is to trade off households in income-generating settings, further, households decided to sacrifice non-essential by less frequently shopping in order to address the challenges of inflation. The findings are in

agreement with the findings of Raihan *et al.* (2023) who found that households employed various coping mechanisms such as changing food consumption, reducing non-food expenditures, using savings, borrowing, relying on aid, selling properties and durable goods, working overtime, involving in secondary occupations, discontinuing child education, involving children in paid work, and migration. However, some households diversified their income streams by focusing on agriculture and entrepreneurship in order to mitigate the effect of the inflation. The data also revealed that households had changed their shopping with 41.1% households shopping less frequently for non-essentials and 35.6% indicated that they were shopping more frequently essentials while some households reported looking from for discounts and promotions. The finding above means that inflation had impacted the budget of household through shopping of non-essential to cover the cost of essential food while some households also resort to looking for discounts. The results also found that households only few households rely on food assistance programs or support with common assistance were social cash transfer, food security packs and drought assistance program.

The cross-tabulation results revealed that 51 households believes that there were other effective coping mechanisms to address the effects of inflation beyond what they were currently using, among these who believe alternative strategies were needed, majority stated government subsidies followed by food assistance programs and capital empowerment. These findings highlight the need for external support for the household to mitigate the impact of food price volatility. Additionally, some households proposed income support, price control and capital empowerment as alternatives strategies. However, the chi-square test was conducted between the effectiveness of coping strategies in managing food inflation and education level, the data showed the no statistically significant association between education level and perceived effectiveness of coping strategies with the Pearson chi-square value of 9.01 and p-value of 0,1732. The findings suggest that the perceived effectiveness of coping strategies in managing influence of inflation is likely to perceived similarly across different education levels.

5. CONCLUSION

This study aimed to assess the effects of on household food consumption patterns in Mongu town. The study used mixed approach combining qualitative and quantitative design with 90 households participated in this study. The findings revealed that inflation had significant impact on household food expenditure and consumption patterns in Mongu. The chi-square test between inflation effects and household food expenditure revealed a statistically significant association between inflation effects and household food expenditure levels with Pearson chi-square of 21.84 and p-value of 0.000 the findings indicated that inflation led to food expenditure increase among the household's in Mongu. The regression analysis also found the significant positive relationship between household size and average monthly household food expenditure with the ANOVA test (F =14.21, P-value =0.0003) indicating that the household size was a critical factor in determining food expenditure, as larger households tend to have higher food expenditure. Furthermore, the study found that households consumption patterns were affected by inflation with majority of households consumed limited variety of foods causing household to stop consuming balanced diet. The chi-square test on income and the quantity of food consumed by households the results confirmed a statistically significant association income and changes in food consumption (Pearson chi-square =15.38, p-value= 0.0175) suggesting that household income and quantity of food consumed were not independent as income level is a critical factor in influencing food consumption patterns among the households. The study further, shows that households employed different coping mechanisms in order to mitigate the effects of inflation with majority of households reported the most common strategy including reducing non-essential expenses, substituting expensive foods with cheaper alternatives, borrowing money or food as well generating income streams. Furthermore, the study revealed that household's majority of households believe that there were other effective coping mechanisms to address the effects of inflation beyond what they were currently using, among those government subsidies was the most indicated approach. However, the chi-square test between the education level and perceived effectiveness of coping strategies revealed no statistically significant association (Pearson chi-square value of 9.01 and p-value of 0,1732.) suggesting that the perceived effectiveness of coping strategies in managing influence inflation is likely to perceived similarly across different education levels.

RECOMMENDATIONS

The study identified a number of issues which required the researcher to make specific recommendations at the research. The following are specific recommendations that have been proposed by the researcher

i. Government interventions: Government should implement policies to stabilize food prices and improve food security, such as price controls and subsidies.

ii. Income support and social protection: Government and other stakeholders should provide income support and expand social protection programs, like cash transfer and employment opportunities to help households cope with inflation.

iii. Food security measures: Government should also implement food assistance programs and agricultural development initiatives to improve food availability and reduce reliance on external sources.

iv. Household budgeting and coping strategies: Encourage households to prioritize essential expenses, manage budgets effectively, and employing strategies like reducing non-essential expenses

v. Education and awareness: to implement education and awareness programs to inform households about inflation's effects and effective coping strategies, empowering them to manage its impact.

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