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# The Unstable Price Movement of Goods and Commodities and Its Impact on the Local Residents of Dapa, Surigao del Norte

**Maybelyn T. Antoni[1], Euwegine A. Erong[1], Kritz D. Guma[1], Charlyn Sulapas[1], Jasmen Sulapas[1]**

[1]Bachelor of Science in Tourism Management, Siargao Island Institute of Technology, Dapa, Surigao del Norte, Philippines

Email: maybelynantoni1@gmail.com

**ABSTRACT**

This study assessed residents' perceived economic effects of unstable goods and commodity prices in Dapa, Surigao del Norte, and examined differences across demographic groups. Using a descriptive-comparative design, the researchers surveyed 200 residents through a researcher-developed questionnaire. Frequencies, percentages, weighted means, Kruskal–Wallis tests, and Mann–Whitney U tests were used to analyze the responses. Poverty risks received the highest mean rating (M = 2.96), followed by purchasing power (M = 2.70), transportation costs (M = 2.55), and budget strain (M = 2.37). Most respondents (81.0%) reported monthly family incomes of ₱20,000 or less. Significant differences in selected perceived effects emerged across age, civil status, occupation, family size, and income groups, whereas none were detected by sex. The findings indicate that perceived financial vulnerability associated with commodity-price instability is multidimensional and varies across certain household characteristics, with poverty risks presenting the foremost concern. The local government should prioritize livelihood opportunities and support local agricultural and fisheries production and distribution to address reported financial pressures and transportation-related costs. Findings are limited to self-reported perceptions in one municipality, and the reported group comparisons did not identify which specific categories differed. The study provides locally grounded evidence to guide more responsive livelihood support and household-focused economic planning in an island community.

**Keywords:** *Budget Strain, Commodity Price Fluctuations, Dapa, Household Expenditures, Poverty Risks, Purchasing Power, Transportation Costs*

## 1. INTRODUCTION

### *1.1. Background and Context of the Study*

Fluctuations in the prices of essential goods and commodities influence household purchasing power, expenditure priorities, and access to daily necessities. Food, fuel, transportation, electricity, and household supplies are recurring expenses; consequently, changes in their prices can affect how families allocate limited financial resources. In the Philippines, the Philippine Statistics Authority (PSA, 2026a) estimated average annual family expenditure at PHP 321.85 thousand in 2025, compared with PHP 258.05 thousand in 2023. These figures describe changes in household expenditure rather than inflation alone, but they underscore the importance of understanding family spending. The World Bank (2024) also identified inflation management and vulnerability to extreme weather as relevant considerations for sustaining poverty reduction in the country. National indicators provide essential context, although they do not fully capture differences in household circumstances across communities. The law of supply and demand provides an economic basis for understanding how changes in market conditions relate to prices and consumer decisions. Maslow's hierarchy of needs offers a complementary perspective on why households prioritize food, shelter, and security when financial resources are constrained (Chavda, 2024). These perspectives provide a theoretical basis for understanding household purchasing power, budget strain, and broader concerns regarding access to essential goods amid commodity-price fluctuations. Dapa, a municipality on Siargao Island in Surigao del Norte, occupies an important position in the island's transport network; the Port of Dapa is recognized in an executive order establishing its port zone (Executive Order No. 119, 2012). Reliance on supplies delivered from the mainland and exposure to transport-related expenses are concerns identified in the local study context. This island setting provides a meaningful context for examining residents' experiences of unstable commodity prices and their implications for everyday household expenditures.

### *1.2. Research Problem*

Commodity price movements may create unequal financial pressures because households differ in income, occupation, family size, and consumption requirements. Negi (2022) found that increases in food prices have different implications for households that produce food and those that purchase it, while Kukk et al. (2025) demonstrated how differences in household consumption baskets shape personal inflation exposure and spending decisions. Within the Philippines, the PSA (2025b) reported an annual average inflation rate of 4.2% in 2024 for households in the bottom 30% income group. These findings support examining price-related concerns at the household level rather than assuming that aggregate inflation affects every resident similarly. The issue is particularly relevant to Dapa because provincial inflation measures do not identify the specific economic difficulties experienced within the municipality. Surigao del Norte's headline inflation increased from 0.8% in February to 1.0% in March 2024, partly reflecting changes in housing-related utilities and transportation (PSA, 2024b). However, these provincial indicators do not directly reflect residents' perceptions of purchasing power, budget strain, poverty risks, and transportation costs within the municipality of Dapa. Nor do they indicate whether such experiences differed according to respondents' socioeconomic characteristics. These locally relevant questions formed the central research problem investigated in this study.

### *1.3. Research Gap*

Previous research has documented the relationship between price changes and household economic behavior, but the settings and measures used do not directly explain residents' experiences in Dapa. Negi (2022) examined the welfare implications of food-price changes for agricultural producers and consumers in India. Kukk et al. (2025) analyzed personal inflation exposure and financial responses using bank-account data from a different national setting. Both

studies provide useful insights, yet neither establishes which price-related difficulties are most prominent among households in a Philippine island municipality. Similarly, provincial inflation statistics describe price movements without directly examining the four dimensions of household economic vulnerability assessed in this study (PSA, 2024b). The specific research gap concerned the combined assessment of purchasing power, budget strain, poverty risks, and transportation costs among residents of Dapa, including differences in these perceived economic effects according to age, sex, civil status, occupation, family size, and monthly family income. The present study addressed this contextual gap by examining residents' reported experiences and identifying concerns that could guide local recommendations.

### *1.4. Purpose and Objectives of the Study*

This study aimed to assess the perceived impact of unstable movements in the prices of goods and commodities on adult residents of Dapa, Surigao del Norte. Specifically, it sought to describe respondents according to age, sex, civil status, occupation, family size, and monthly family income; assess the perceived effects of commodity-price fluctuations on purchasing power, budget strain, poverty risks, and transportation costs; and identify the dimension receiving the highest mean rating. It also sought to identify significant differences in reported impacts when respondents were grouped by profile characteristics and to formulate recommendations based on the findings. The study focused on residents aged 18 years or older who had lived in the community for at least one year and participated in household financial decisions.

### *1.5. Significance and Practical Contribution of the Study*

The study provides a municipality-specific perspective on the household implications of unstable commodity prices. Its findings may help Dapa residents understand recurring financial pressures and make informed decisions about spending priorities. For the municipal government and community organizations, the evidence may assist in identifying concerns relevant to livelihood assistance, financial literacy, and social protection planning. Differences in reported experiences across respondent groups may also help local stakeholders recognize which households require closer consideration. For future researchers, the results provide a basis for comparing household price-related experiences across communities with different economic or geographic conditions. The study offers descriptive and comparative evidence and locally grounded recommendations; it does not establish causal effects or evaluate particular government interventions.

### *1.6. Sustainable Development Goals (SDG) Alignment*

The study supports Sustainable Development Goal (SDG) 1, No Poverty, by examining purchasing power, budget strain, and perceived poverty risks among residents who face changing costs of basic necessities. Understanding these dimensions can inform locally appropriate discussions of household vulnerability and economic resilience. The study also has indirect relevance to SDG 2, Zero Hunger, as fluctuations in commodity prices may influence household access to essential food products, although food insecurity was not assessed as a separate outcome. Both goals emphasize reducing deprivation and strengthening access to basic needs (United Nations Department of Economic and Social Affairs, 2024). By documenting residents' experiences within an island municipality, the study provides contextual evidence relevant to these goals without claiming that the research itself achieves poverty reduction or food security.

## 2. METHODOLOGY

### *2.1. Research Design*

This study employed a descriptive-comparative research design to examine local residents' perceptions of unstable prices of goods and commodities in the Municipality of Dapa, Surigao del Norte. The descriptive component examined four dimensions of perceived economic effects: purchasing power, budget strain, poverty risks, and transportation costs. The comparative component assessed differences in these perceptions across respondents' age, sex, civil status, occupation, family size, and monthly family income. The design described experiences and compared groups without manipulating variables (Hill et al., 2024).

### *2.2. Research Locale, Population, and Participants or Respondents*

The study was conducted among local residents of the Municipality of Dapa, Surigao del Norte, whose household spending decisions exposed them to changing commodity prices. The study involved a total of 200 respondents. Of these, 23 (11.5%) were aged 18–20 years, 26 (13.0%) were aged 21–23, 27 (13.5%) were aged 24–26, and 16 (8.0%) were aged 27–29. The remaining 108 (54.0%) were aged 30 years or older. Respondents provided firsthand perspectives on price fluctuations and household expenditure decisions relevant to the research objectives. The study focused on residents aged 18 years or older who had lived in the municipality for at least one year and participated in household financial decisions.

### *2.3. Sampling Technique and Sample Determination*

The study included 200 local residents whose responses formed the basis of the descriptive and comparative analyses. Participants were described as local residents with firsthand experience of commodity-price fluctuations and involvement in household financial decisions. The methodological description focused on the 200 participating residents and their experiences of commodity-price fluctuations. As the sampling procedure and sample-size determination were not documented, the findings are interpreted within the surveyed group rather than assumed to represent the entire municipal population (Lakens, 2022).

### *2.4. Research Instrument and Validation*

Data were collected using a researcher-developed questionnaire divided into two sections. Part I recorded age, sex, civil status, occupation, family size, and monthly family income. Part II assessed the perceived effects of commodity-price fluctuations across four dimensions: purchasing power, budget strain, poverty risks, and transportation costs. Experts reviewed its clarity, relevance, and alignment with study objectives (Hill et al., 2022; Ranganathan et al., 2024). The reported mean scores were interpreted using four descriptive ranges: 1.00–1.74 (not affected), 1.75–2.49 (slightly affected), 2.50–3.24 (affected), and 3.25–4.00 (highly affected). This discrepancy requires clarification. Validity and reliability coefficients were unspecified.

### *2.5. Data Gathering Procedure*

Before distributing questionnaires, the researchers secured a formal request letter and presented it to the appropriate local authorities. Following approval, they personally administered the instrument to selected community respondents. Participants received an orientation on completing the questionnaire and were allotted one hour to answer. Researchers checked completed forms for item responses, then sorted and tallied them. The completed responses then served as the input for statistical analysis. The documented data-gathering process covered questionnaire administration, respondent orientation, retrieval of completed responses, and preparation of the responses for statistical analysis.

### *2.6. Data Analysis and Statistical Treatment*

Responses were organized and tabulated. Frequencies and percentages summarized age, sex, civil status, occupation, family size, and monthly family income. Weighted means were used to summarize respondents' perceived economic effects across purchasing power, budget strain, poverty risks, and transportation costs. Kruskal–Wallis tests were used to examine differences in perceived economic effects across age, civil status, occupation, family size, and monthly family income groups, while Mann–Whitney U tests were used to compare responses according to sex. Statistical significance was evaluated at the .05 level. The findings were interpreted according to the results of the reported nonparametric comparisons across demographic groups, consistent with recommendations for transparent statistical reporting (Kwak et al., 2026).

### *2.7. Ethical Considerations*

The researchers submitted a formal request to appropriate local authorities and obtained approval before administering community questionnaires. They also oriented respondents on completing the instrument. Survey ethics guidance emphasizes participant protection (Zimba & Gasparyan, 2023). The documented ethical procedures included obtaining authorization from the appropriate local authorities before questionnaire administration and providing respondents with instructions regarding survey participation. The methodological account presented these administrative and orientation procedures without specifying additional consent documentation, confidentiality arrangements, or institutional ethics-review details.

## 3. RESULTS AND DISCUSSION

### *3.1. Demographic Profile of the Respondents*

The study involved 200 local residents of Dapa, Surigao del Norte, whose demographic characteristics were described in terms of age, sex, civil status, occupation, family size, and family monthly income. The age distribution showed that respondents aged 30 years and above comprised the largest group (n = 108, 54.0%). Those aged 24–26 years accounted for 27 respondents (13.5%), followed by ages 21–23 (n = 26, 13.0%), 18–20 (n = 23, 11.5%), and 27–29 (n = 16, 8.0%). Overall, 46.0% were younger than 30 years, whereas 54.0% belonged to the oldest reported category. These findings describe the age composition of the respondents and provide a demographic basis for examining differences in perceived economic effects across age categories.

In terms of sex, 130 respondents (65.0%) were male and 70 (35.0%) were female. The predominance of male respondents indicates that the aggregate survey responses reflect a larger male contribution, but sex alone does not identify participants' employment arrangements, earning roles, or household financial responsibilities. Regarding civil status, 119 respondents (59.5%) were single, 65 (32.5%) were married, nine (4.5%) were recorded as widower, and seven (3.5%) were separated or divorced. The distribution therefore included individuals with different civil statuses, although the survey profile did not establish how household obligations varied within these categories.

Occupationally, the largest proportion belonged to the category "Others" (n = 120, 60.0%). Among the specified occupations, 21 respondents (10.5%) were teachers, 15 (7.5%) were farmers, 11 (5.5%) were carpenters, nine (4.5%) were businessmen, nine (4.5%) were government officials, eight (4.0%) were tour guides, and seven (3.5%) were fishermen. These occupations demonstrate participation from several livelihood sectors within Dapa. However, the "Others" classification encompasses most respondents without specifying their

occupations; accordingly, the findings cannot establish the characteristics of the individual livelihoods contained in that category.

Family size was concentrated in households with three to four members (n = 103, 51.5%), followed by two-member households (n = 45, 22.5%) and households with five to six members (n = 38, 19.0%). Six respondents (3.0%) reported seven to eight family members, seven (3.5%) reported nine to ten, and one (0.5%) reported 11 or more. Together, families with two to four members accounted for 74.0% of the surveyed households. This distribution provides context for household spending requirements; nevertheless, the size categories alone do not establish actual expenditure levels or household dependency arrangements. Morgan et al. (2024) identified family size as a relevant correlate of food insecurity in a multicountry household survey, providing a broader perspective on the importance of household composition when examining perceived financial vulnerability and budget-related concerns.

The family monthly income distribution was concentrated in the ₱10,000–₱15,000 bracket (n = 122, 61.0%), followed by ₱15,001–₱20,000 (n = 40, 20.0%), ₱20,001–₱25,000 (n = 20, 10.0%), and ₱25,001–₱30,000 (n = 8, 4.0%). Three respondents (1.5%) reported ₱30,001–₱35,000, two (1.0%) reported ₱35,001–₱40,000, one (0.5%) reported ₱40,001–₱45,000, and four (2.0%) reported ₱45,001–₱50,000. Thus, 162 respondents (81.0%) reported family monthly income of ₱20,000 or less. This concentration is important when interpreting the perceived effects of commodity-price fluctuations, because the resources available to purchase essentials may differ across households. The World Bank (2026) documented the disproportionate exposure of poorer Philippine households to increases in food prices, while the Philippine Statistics Authority (2024a) described poverty measurement in relation to income needed for basic food and non-food requirements. However, the present income brackets should not be treated as a direct classification of respondents as poor because the survey did not establish poverty status using household-adjusted official thresholds. Taken together, the demographic results describe the surveyed population and provide a basis for examining whether perceived price-related effects varied across respondent groups.

### *3.2. Perceived Effects of Unstable Prices of Goods and Commodities*

The study assessed four dimensions of residents' perceived experience of unstable commodity prices: purchasing power, budget strain, poverty risks, and transportation cost. Among the 200 respondents, poverty risks obtained the highest mean (M = 2.96, SD = 1.110), followed by purchasing power (M = 2.70, SD = 1.004), transportation cost (M = 2.55, SD = 0.880), and budget strain (M = 2.37, SD = 0.828). The pattern indicates that the poverty-risks indicator was rated highest relative to the other three dimensions, whereas budget strain was rated lowest. Poverty risks also had the largest standard deviation, suggesting greater dispersion of responses on that indicator; budget strain had the smallest standard deviation. Based on the reported interpretation ranges, poverty risks (M = 2.96), purchasing power (M = 2.70), and transportation cost (M = 2.55) fell within the "affected" category, while budget strain (M = 2.37) fell within the "slightly affected" category.

The purchasing-power result reflects respondents' assessment of their ability to acquire goods and services amid changes in prices. It is consistent with the general economic context described by the Philippine Statistics Authority (2025a), whose consumer price index report documented price movements across food, housing-related expenses, and transportation in the

Philippines. Likewise, the Philippine Statistics Authority (2026b) reported a separate inflation series for the bottom 30% of income households, emphasizing the relevance of considering the expenditure circumstances of lower-income groups. These national statistics provide contextual support, but they do not represent measurements of prices in Dapa or establish when each surveyed resident encountered a particular price change. Transportation cost and budget strain obtained lower mean scores than poverty risks and purchasing power, yet they remained components of the reported experience. Transportation expenses can compete with other household necessities, while budget strain concerns how respondents perceive the pressure of allocating limited resources. Albert (2026) explained that fuel-price shocks may transmit through transport and other essential expenditures in the Philippines; this broader mechanism helps contextualize why transportation was included as a distinct study indicator. The results collectively indicate that residents associated unstable commodity prices with several interrelated aspects of financial well-being, with a relatively stronger emphasis on perceived poverty risk and purchasing power than on the other assessed dimensions.

### *3.3. Poverty Risks as the Most Strongly Rated Economic Impact*

The third research objective sought to identify which of the four economic dimensions was rated most strongly by residents of Dapa. Poverty risks ranked first ($M = 2.96$, $SD = 1.110$), exceeding purchasing power ($M = 2.70$, $SD = 1.004$), transportation cost ($M = 2.55$, $SD = 0.880$), and budget strain ($M = 2.37$, $SD = 0.828$). This ranking indicates that respondents placed the greatest relative emphasis on the possibility of economic hardship associated with unstable commodity prices. The finding describes perceived risk, not the actual number of residents living in poverty or the extent to which price increases caused a change in measured poverty status. This perception is relevant to the sample's income profile, in which 61.0% reported monthly family income of ₱10,000–₱15,000 and 81.0% reported ₱20,000 or less. The concentration of respondents in the lower reported income brackets provides useful socioeconomic context for interpreting the relatively high rating of perceived poverty risks, without implying an individual-level correlation between income and poverty-risk scores. The World Bank (2026) found that food accounts for a larger share of expenditure among the poorest Philippine households and that higher food prices can increase vulnerability. Morgan et al. (2024) likewise identified an association between food-price inflation and food insecurity across surveyed Asian households. These findings agree with the broader relevance of household resources to price-related concerns, without proving that the same relationships or outcomes occurred among individual Dapa respondents. The Philippine Statistics Authority (2024a) defined poverty incidence using income relative to the minimum requirements for food and non-food needs, underscoring why perceived poverty risk should be distinguished from an official poverty measure. For the present study, the result indicates that poverty-related vulnerability deserves attention when interpreting the community's perceived economic situation. Its principal contribution is identifying the highest-rated domain of concern among the four measured indicators, rather than estimating a change in the local poverty rate.

### *3.4. Differences in Perceived Economic Effects Across Age Groups*

Kruskal–Wallis tests were conducted to compare the four perceived economic indicators across the five reported age categories. Statistically significant differences were observed for purchasing power, $\chi^2(4) = 15.29$, $p = .004$; poverty risks, $\chi^2(4) = 26.25$, $p < .001$; and transportation cost, $\chi^2(4) = 15.20$, $p = .004$. Budget strain did not show a statistically significant difference, $\chi^2(4) = 4.09$, $p = .395$, at the study's .05 significance level. The strongest reported test statistic among

the age comparisons was for poverty risks, although the statistics alone do not quantify the practical magnitude of differences between individual age categories. These omnibus findings indicate that the distributions of purchasing-power, poverty-risk, and transportation-cost responses were not identical across all age categories. However, no post-hoc pairwise comparisons or age-specific outcome summaries were reported. Consequently, it cannot be determined which particular age groups differed, which groups reported higher scores, or whether the differences followed a consistent age-related direction. The non-significant budget-strain result likewise does not establish that all age groups experienced equal pressure. In the wider context of household vulnerability described by the World Bank (2026), differences in economic resources and expenditure needs may be relevant topics for further investigation, but these characteristics were not tested as explanations for the observed age-group differences. The result supports examining age as a potentially relevant grouping factor for selected perceived impacts while retaining appropriate limits on interpretation.

### *3.5. Perceived Economic Effects Compared by Sex*

Mann–Whitney U tests were conducted to compare the perceived economic effects of commodity-price fluctuations between male and female respondents. None of the four indicators met the .05 significance criterion: purchasing power, $U = 3804$, $p = .052$; budget strain, $U = 4543$, $p = .986$; poverty risks, $U = 4418$, $p = .722$; and transportation cost, $U = 4332$, $p = .573$. Purchasing power had the smallest p-value, but it remained above the stated threshold and therefore was not statistically significant. The Mann–Whitney U results were interpreted using the established .05 significance level to determine whether the reported perceptions differed significantly between male and female respondents. These findings indicate that the study did not detect statistically significant sex-based differences in the four measured perceptions. They do not demonstrate that male and female residents had identical experiences or that sex could never be relevant to exposure to changing prices. The sample included 130 male respondents and 70 female respondents, and the source did not provide sex-specific median scores or other group summaries that could clarify the direction of any observed contrasts. Existing research on inflation-related household vulnerability emphasizes income, spending needs, and access to resources (Morgan et al., 2024; World Bank, 2026), but that literature should not be interpreted as direct confirmation of the present null sex-group results. Within the surveyed group, the four perceived effects were not statistically differentiated by sex using the reported tests.

### *3.6. Differences in Perceived Economic Effects by Civil Status*

Comparisons among the four reported civil-status groups were examined using Kruskal–Wallis tests. Transportation cost was the only indicator showing a statistically significant difference, $\chi^2(3) = 11.55$, $p = .009$. The results for purchasing power, $\chi^2(3) = 1.08$, $p = .782$; budget strain, $\chi^2(3) = 3.93$, $p = .270$; and poverty risks, $\chi^2(3) = 7.12$, $p = .068$, did not meet the .05 significance criterion. Although the p-value for poverty risks was comparatively closer to the threshold, the appropriate statistical decision remained non-significant. The significant transportation-cost result suggests that at least some civil-status categories differed in their reported experiences of this specific expense. It does not identify which groups were more affected, because pairwise comparisons and civil-status-specific outcome distributions were not provided. Transport-related expenditure is a recognized pathway through which price changes may affect household budgets; Albert (2026) discussed the potential consequences of fuel-price increases for transportation and household purchasing power. Nevertheless, that literature does not establish civil-status differences in Dapa or explain the observed statistical pattern. The present finding supports

considering transportation needs in assessments of household circumstances while indicating that the other three perceptions did not exhibit statistically demonstrable differences across civil-status categories in the reported analysis.

### *3.7. Differences in Perceived Economic Effects Across Occupations*

Kruskal–Wallis results indicated statistically significant differences across the eight reported occupational categories for budget strain, $\chi^2(7) = 30.0$, $p < .001$; poverty risks, $\chi^2(7) = 30.3$, $p < .001$; and transportation cost, $\chi^2(7) = 25.1$, $p < .001$. Purchasing power did not reach statistical significance, $\chi^2(7) = 13.4$, $p = .062$. Thus, the reported comparisons differentiated occupational groups on three of the four indicators, with poverty risks yielding the largest test statistic among these occupational analyses. The results suggest that occupation is relevant to variation in selected perceptions of price-related hardship, but they do not identify the occupational groups with higher or lower scores. The omnibus comparisons established differences across occupational categories but did not determine which specific occupational groups differed or the direction of those differences. The predominance of the "Others" occupational category (60.0% of respondents) further limits detailed interpretation of specific livelihood patterns. Albert (2026) described how energy-price shocks may affect employment-related sectors and household costs, and the World Bank (2026) emphasized the importance of economic resources for resilience against price changes. These sources offer contextual explanations for why occupational circumstances may matter; they do not demonstrate that any particular occupation in the survey experienced greater hardship. The findings identify budget strain, poverty risks, and transportation costs as the domains in which occupational differences were detected.

### *3.8. Differences in Perceived Economic Effects by Family Size*

The Kruskal–Wallis tests across the six family-size categories showed a statistically significant difference only for budget strain, $\chi^2(5) = 21.05$, $p < .001$. The results for purchasing power, $\chi^2(5) = 8.48$, $p = .132$; poverty risks, $\chi^2(5) = 6.85$, $p = .232$; and transportation cost, $\chi^2(5) = 3.97$, $p = .554$, were not statistically significant at the .05 level. Budget strain therefore emerged as the specific perceived impact differentiated by family-size category in the study. Households with different numbers of members may have different consumption and resource-allocation requirements, which makes family size a relevant dimension of household budgeting. However, the significant omnibus result does not establish that larger families necessarily experienced greater budget strain. No family-size-specific outcome scores or follow-up comparisons were reported. Morgan et al. (2024) found larger family size to be relevant to food insecurity in their household survey across developing Asia, providing a related perspective on the importance of household composition. Because the present study measured perceived budget strain rather than food insecurity, the two findings should be understood as contextually related rather than identical. The local result supports attention to household size when assessing budget-related concerns, without indicating a definite direction of difference across household categories.

### *3.9. Differences in Perceived Economic Effects by Family Monthly Income*

The final set of Kruskal–Wallis tests examined differences across the eight reported family monthly income brackets. Statistically significant differences emerged for budget strain, $\chi^2(7) = 20.4$, $p = .005$; poverty risks, $\chi^2(7) = 19.9$, $p = .006$; and transportation cost, $\chi^2(7) = 16.9$, $p = .018$.

Purchasing power did not reach statistical significance, $\chi^2(7) = 13.7$, $p = .057$. Although purchasing power had a p-value close to .05, the result did not satisfy the specified decision rule. The significant tests show that at least some income categories differed on the first three listed indicators, but they do not identify which income brackets recorded higher or lower responses.

This pattern is important in light of the sample's concentration in monthly family income categories of ₱20,000 or less (81.0%). The World Bank (2026) reported that food takes up a greater share of the budgets of poorer Philippine households and that relative food-price increases are a source of poverty vulnerability. Similarly, Morgan et al. (2024) identified low income and financial difficulties as factors associated with food insecurity in developing Asia. The Philippine Statistics Authority (2026b) also separately monitored inflation experienced by the bottom 30% of income households, underscoring the relevance of examining price movements across income groups. These national and regional sources provide useful context, but they do not establish the direction or causes of the differences observed within the Dapa sample.

The current results therefore support distinguishing income groups when examining perceived budget strain, poverty risks, and transportation cost. The significant omnibus results indicate variation among income categories, although the reported analyses do not establish a consistent direction of differences between lower- and higher-income groups. Moreover, the absence of a statistically significant purchasing-power difference should not be taken to mean that all households had the same purchasing capacity or that this dimension lacked practical relevance.

Across the six demographic grouping variables, significant differences appeared selectively rather than uniformly. Age was associated with differences in purchasing power, poverty risks, and transportation cost; civil status differed only for transportation cost; occupation and family monthly income differed for budget strain, poverty risks, and transportation cost; and family size differed only for budget strain. None of the four indicators showed a statistically significant difference by sex. Together with the descriptive ranking that placed poverty risks highest, these results indicate that perceived financial vulnerability amid unstable commodity prices was multidimensional and varied across selected demographic groupings. This interpretation remains specific to the 200 respondents, the indicators measured, and the comparisons reported in the study; the analyses do not demonstrate causal effects of commodity prices or identify which individual categories account for the significant omnibus differences.

## 4. CONCLUSIONS AND RECOMMENDATIONS

The findings revealed that residents of Dapa, Siargao, perceived unstable prices of goods and commodities as a source of household financial pressure, with poverty risks receiving the highest mean rating, followed by purchasing power. Transportation costs also emerged as a reported economic concern, while budget strain, despite receiving the lowest mean rating among the four dimensions, remained relevant to respondents' perceptions of household resource allocation. Statistically significant differences in selected perceived economic effects were observed across age, civil status, occupation, family size, and monthly family income groups, indicating variation in responses according to these demographic characteristics. No statistically significant differences were detected between male and female respondents across the four measured dimensions of perceived economic effects. Collectively, these findings demonstrate that residents associated commodity-price instability with several dimensions of household financial vulnerability, particularly perceived poverty risks, purchasing power, transportation costs, and budget strain. The study emphasized the importance of considering household

income, family size, and livelihood conditions when addressing the financial challenges experienced by local communities in Dapa, Siargao.

Based on the findings, the Local Government Unit of Dapa should prioritize initiatives that expand employment and livelihood opportunities to address the heightened poverty risks and financial difficulties experienced by residents. These initiatives should consider differences in occupation, household size, and monthly family income to ensure that assistance responds to the circumstances of affected households. Furthermore, the local government, in coordination with other municipalities in Siargao, should establish programs supporting farmers and fisherfolk in the production and distribution of locally sourced vegetables, fruits, fish, and other seafood products. Strengthening local production and distribution may reduce dependence on supplies transported from outside the island, minimize associated transportation expenses, and improve the accessibility of essential commodities. These initiatives should also promote sustainable income opportunities for local producers while helping households manage their purchasing needs. Priority should be given to practical measures addressing the financial pressures identified among the respondents.

The study focused on local residents of Dapa, Siargao; therefore, its findings should be interpreted within the municipality's specific socioeconomic and geographic context. The investigation concentrated on four dimensions of price instability: poverty risks, purchasing power, transportation costs, and budget strain, together with selected demographic characteristics. Consequently, other potential economic implications were beyond the study's reported scope. Furthermore, the findings reflected respondents' assessments and identified associations rather than establishing causal relationships. Future investigations may include residents from other municipalities in Siargao and examine additional economic factors to provide a broader understanding of how price instability affects households across different communities.

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