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Analysis of Changing Food Prices in New Providence, Bahamas, 2017-2023

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ABSTRACT

The United Nations has set the year 2030 as the year to end hunger, food insecurity, and malnutrition (SDG Targets 2.1 and 2.2). With less than six years left to achieve the 2030 global targets, there are concerns in many countries, including small island developing states, about rising food prices. The objective of this study was to investigate food availability and prices over a 5-year timeframe (2017 & 2023). The study collected primary data directly from stores in New Providence, Bahamas. Twenty-seven stores and fifty-six stores were surveyed in 2017 and 2023, respectively using purposeful sampling methods. The prices of selected staple items were standardized to reflect the price per unit and/or price per pound of the items and then the mean prices between years were compared using an independent samples t-test of unequal variance (Welch's Test) and, for food availability, a chi-square test of independence. Of the fourteen products examined, nearly all demonstrated a significant increase in price, with the exception of grits and pigeon peas, which remained the same, and sugar, which decreased. Product availability remined stable, with only availability of tomatoes decreasing, and mayonnaise increasing. Overall, these findings raise important questions about the price of a healthy diet in the Bahamas.

1. Introduction

The United Nations has set the year 2030 as the year to end hunger, food insecurity, and malnutrition (SDG Targets 2.1 and 2.2). With less than six years left to achieve the 2030 global targets, there are concerns in many countries, including Small Island Developing States (SIDS), about environmental challenges and increasing food prices. According to the Food and Agriculture Organization (FAO), the growing trend of depending on food imports is a cause for concern in SIDS countries, putting them at risk of heightened food insecurity and malnutrition. In many SIDS countries, the primary source of food is through foreign imports, rather than domestic food production. This reliance on imports is most pronounced in several countries in the Caribbean, where 80 percent or more of the available food comes from imports. For instance, in countries such as St. Kitts and Nevis, as much as 95 percent of the available food is imported (FAO, 2016). Similarly, in the Pacific region, the Cook Islands rely on imports for approximately 92 percent of their available food (FAO, 2016). Estimates indicate that the same is true for the Bahamas.

The Bahamas is an archipelago of 700 islands and 2,400 cays extending 760 miles from the northwest coast of Florida to the southeast of Haiti. Its total area is 5,358 sq. miles (13,878 sq. km.) and approximately 30 Bahamian islands actively inhabited. According to the 2022 Census of Population and Housing, preliminary results made available by The Bahamas National Statistical Institute suggest that the country is reported to be home to 399,314 people, with a sex distribution of 192,544 males and 206,770 females. Tourists who visit the country in relatively high numbers each year, however, often outnumber Bahamians. In 2022, the Ministry of Tourism reported that the island country welcomed a total of 7,000,706 visitors (The Government of Bahamas, 2023a). The tourism industry and its related services make up about 70 percent of the Gross Domestic Product (GDP) of the country and provide employment to more than half of the total workforce, with food and agriculture contributing to less than one percent of the country's GDP (International Trade Administration, 2022).

The Bahamas, much like many other island nations, is heavily dependent on imported goods, including nearly 90 percent of its food products because of insufficient agricultural production. As a result, the

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price of food is high, posing issues for the economy, local agriculture, and job opportunities. Moreover, the high prices create a barrier for those who are unable to afford food, further exacerbating food insecurity. (P. Kendall & Petracco, 2009)

A recent study on food insecurity in the Bahamas found that 21 percent of the population of Nassau was food insecure in 2017, with 11 percent being moderately food insecure and 10 percent severely food insecure (Karpyn et al., 2021). This rate of severe food insecurity in The Bahamas is higher when compared to the rate of severe food insecurity (6.2 percent) for the Caribbean as a whole (Karpyn et al., 2021).

The food insecurity crisis has also been exacerbated by the increasing unanticipated impact of climate change, conflicts (i.e. Russia/Ukraine war), and the COVID pandemic on global food price inflation. (De Pee & Turowska, 2022; Food and Agriculture Organization, 2022; Bai et al., 2022). For example, in the United States, food prices have increased by 9.9 percent in 2022, with a prediction of 6.6 percent increase in 2023 (United States Department of Agriculture, 2023). The invasion of Russia into Ukraine in February 2022, amidst post-pandemic recovery efforts, had a profound impact on global agricultural markets due to the significant roles played by both countries. Russia and Ukraine combined account for approximately one-third of the global wheat trade, 17 percent of global maize trade, and nearly 75 percent of global sunflower oil trade (Food and Agriculture Organization, 2022). This invasion came as a shock to the agricultural industry. Consequently, the FAO Food Price Index, a measure of the monthly change in international prices of a basket of food commodities, experienced unprecedented increases, reaching an all-time high immediately after the invasion and another record high in March 2022, thus exacerbating food insecurity. In March 2022, the index averaged 159.3 points, marking a substantial increase of 17.9 points (equivalent to 12.6 percent) compared to February of the same year (FAO, 2023). The FAO food price index have since decreased from this peak to 126.4 points in March 2023.

Furthermore, the impact of COVID-19 on global food price has contributed to increasing food insecurity. A recent study conducted by the Food and Agricultural Organization (FAO) reported that during the Peak of the COVID-19 pandemic from 2019 to 2021, approximately 17.2 percent of individuals in The Bahamas experienced "moderate to severe food insecurity." (Bahamas Ministry of Agriculture, Marine Resources and Family Island Affairs, 2023). At the same time, The Bahamas has also experienced significant inflation. In 2022, The Central Bank of The Bahamas reported 13.5 percent average increase in inflation for food & non-alcoholic beverages (Central Bank of The Bahamas, 2023).

In the last five years, the government of The Bahamas has made efforts to address food insecurity in the country. Following the increasing inflation in food prices amidst heightened food insecurity, hunger and malnutrition, the government of The Bahamas in the 2022 budget communication announced its commitment to reducing the nation's food imports by 25 percent by 2025 through a $100 million investment in agriculture. To increase the supply of fresh meats in the market, the government committed $500,000 and $600,000 to secure poultry (i.e. broilers) and livestock respectively, and a $300,000 investment to strengthen local production and domestic supply of feed for livestock. The government also made a commitment to support The Bahamas Agriculture and Marine Science Institute (BAMSI) through a $ 1.5 million commitment specifically for technologies, training, and capacity building related to food security. Furthermore, $500,000 in grant funding was budgeted to support farmers. (The Nassau Guardian, 2022).

The government has also pledged to decrease import tariffs on engines and parts to provide support to the fishing industry, as well as on grocery store items to ensure they are more accessible and affordable for the general population. Furthermore, the Ministry of Agriculture, Marine Resources and Family Island Affairs announced in January 2023 its readiness to create a National Food Policy that will drive food security in The Bahamas. (Bahamas Ministry of Agriculture, Marine Resources and Family Island Affairs, 2023) Given the commitment made so far in addressing the increasing price of food and food insecurity in The Bahamans, this study seeks to provide needed data about food availability and food prices for staple food items over a 5-year timeframe (2017 & 2023).

2. Theoretical Framework

The ecological model by Bronfenbrenner provides a framework for understanding food systems, including food store availability. This theoretical framework includes five levels of influence: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. This model provides a grounding framework for the study and underscores the interconnected nature of individual, interpersonal, community, societal, and temporal factors shaping food deserts and quality. In particular, the exosystem encompasses the community and institutional level, and includes factors such as food availability and pricing in grocery stores ((Bronfenbrenner, 1979); Drewnowski & Almiron-Roig, 2010).

3. Materials and Methods

During the Spring of 2017, and again in Spring 2023, a purposeful sample of 27 and 56 grocery stores, respectively, were examined. The store selection process was carried out in two phases. Initially, a comprehensive list of grocery stores across Nassau was compiled, considering representation from each quadrant of the island (north, south, east, and west) and capturing both large and smaller establishments. Next, local residents and leaders were consulted to confirm the accuracy of the list, and to provide insight about the establishments that were most frequented by locals. The 27 initial stores were visited again in 2023, although at that time, 6 stores were no longer in business and another 5 changed owners. Because of the turnover, likely due to the impacts of COVID-19, the research team again undertook the initial process to list available stores (using the phonebook), map stores according to quadrants, include all supermarkets and then identify the most popular grocery stores for sample inclusion.

Trained data collectors from the University of Bahamas (2017) and BAMSI (2023) visited identified stores to collect food price and availability data. Data was collected using a modified version of the Nutrition Environment Measures Survey (NEMS), an internationally standardized and validated tool (Hill et al., 2022)

However, in order to improve regional relevance of the tool; items listed as part of the staple "Breadbasket" list were added to the tool (i.e., tomato paste) and, in response to consultation with local grocers, researchers and residents, several items which were less culturally relevant were removed (i.e. hot dogs) and the instrument pilot tested for feasibility. For each item, data was collected on package size, availability, and price. In order to

standardize price across different store pricing strategies (ie, price per apple vs price for a pound of apples), item prices were calculated after first considering package size, determining price per common quantity (i.e., gram or ounce) and then multiplying that standard unit to obtain the most common package size price (400g butter, for example). Subsequently, descriptive statistics for all products were calculated and comparisons made between product price in 2017 and prices in 2023. Similarly, percentage product availability, i.e., the proportion of a certain food item that is available for purchase in the grocery store at the time of data collection, was determined and compared between the two years.

4. Statistical Analyses

The primary method of statistical analysis for comparing the prices between the two years was an independent samples t-test of unequal variance, commonly known as Welch's Test. This test was chosen because it does not assume equal variances between groups, making it more suitable for this study where the number of stores surveyed in each year was different. The Welch's Test provided a means to statistically assess whether the mean prices of staple food items in grocery stores in New Providence significantly differed between the years 2017 and 2023.

In addition to the price comparison, a chi-square test of independence was employed to analyze the availability of these staple items in the surveyed stores across the two years. This test helped in understanding whether the availability of specific items was independent of the year i.e. the presence and accessibility of food items in the surveyed stores. Similarly, percentage product availability, i.e., the percentage of grocery stores that had the specific food item available for purchase at the time of data collection, was determined and compared between the two years.

5. Results

The study conducted a comparison of the availability and price of food items between 2017 and 2023. As indicated in Table 1, and Figure 1, findings of the study highlight notable changes in the availability of various food items during this period.

Table 1 - Percentage Food Availability

Food items	2017 Percentage Availability (n=27)	2023 Percentage availability (n=56)	Change in Percentage availability
Apple	93%	73%	-20%
Bread	85%	89%	-4%
Butter	85%	84%	-1%
Corned Beef	93%	96%	3%
Egg	89%	82%	-7%
Eva. Milk	89%	95%	6%
Flour	96%	96%	0%
Grits	89%	96%	7%
Mayonnaise	89%	100%	11%
Oil	96%	91%	-5%
Pigeon Peas	89%	91%	2%
Rice	96%	100%	4%
Sugar	96%	93%	-3%
Tomatoes	89%	63%	-26%

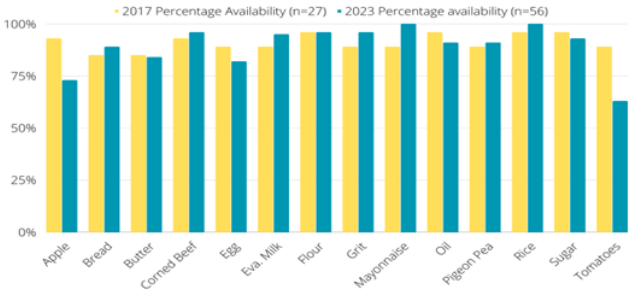

Figure 1 - Percentage Availability of Food Items

Among the food items investigated, the overall availability of seven out of the fourteen food items declined within the five-year period. Table 2 demonstrates that there were statistically significant differences in the availability of tomatoes ($X2$ (1, N = 83) = 4.95, $p < .05$) and mayonnaise ($X2$(1, N = 83) = 3.660, $p < .05$) between 2017 and 2023, as indicated by the chi-square tests. There was no significant difference in the availability of bread, corned beef, evaporated milk, grits, pigeon peas, rice, apples, butter, eggs, cooking oil, sugar, and flour.

Table 2 - Chi-Square Test of Independence on Food Availability

Food items	Chi-Squared	p-value
Apple	0.557	0.4555
Bread	0.032	0.859
Butter	0.000	1.00
Corned Beef	0.048	0.828
Egg	0.2208	0.638
Flour	0.000	1.000
Grits	0.740	0.3887
Mayo	3.660	0.0557*
Milk	0.246	0.620
Oil	0.167	0.683
Pigeon Peas	0.000	1.000
Rice	0.1408	0.708
Sugar	0.0155	0.901
Tomatoes	4.955	0.026*

* $p < 0.05$

Table 3 and Figure 2 provide an overview of the changes in price for various items over a period of five years, from 2017 to 2023 standardized to a common weight (lbs or oz) and or size. The table highlights the percentage increase in price as well as the average price difference for each item. Starting with fruits, the price of apple (lb) shifted by an increase of 67 percent, with an average price difference in the 5-year time frame of $0.85. Moving on to staple foods, a moderate increase in the price of bread (lb) was observed, with 12 percent increase in average price resulting in average price difference of $0.32 from 2017 to 2023. The price of rice (lb), another staple food, also increased by 34 percent with average price difference of $0.32. Butter (lb) has witnessed the highest increase in price, a 247 percent increase, with an average price difference of $2.84. Pigeon peas (12 oz can) had the lowest increase in price, with an eight increase and average price difference of $0.12.

Table 3 - Changes in Price of Food

Food Items	2017 Average price ($)	2023 Average price ($)	Price Difference ($)	Percentage Difference in price	2017 Standard Deviation	2023 Standard Deviation
Apple (per lb)	1.27	2.12	0.85	67%	0.47	1.33
Bread (per lb)	2.74	3.05	0.32	12%	1.31	1.38
Butter (per lb)	1.15	3.99	2.84	247%	1.09	2.92
Corned Beef (per lb)	2.83	4.03	1.20	42%	0.93	1.09
Egg (per dozen)	2.10	4.81	2.70	128%	0.44	2.53
Evaporated Milk (per lb)	1.25	1.67	0.41	33%	0.52	0.56
Flour (per lb)	0.80	1.27	0.46	58%	0.21	0.34
Grits (per lb)	1.00	1.24	0.24	24%	0.51	0.58
Mayonnaise (per ounce)	0.18	0.35	0.17	96%	0.08	0.15
Oil (per lb)	2.05	2.39	0.34	17%	0.59	0.74
Pigeon Peas (per 12 Oz unit)	1.45	1.56	0.12	8%	0.57	0.55
Rice (per lb)	0.87	1.19	0.32	34%	0.30	0.38
Sugar (per lb)	1.00	0.80	0.20	-20%	0.46	0.15
Tomatoes (per lb)	1.57	2.50	0.93	59%	0.72	1.60

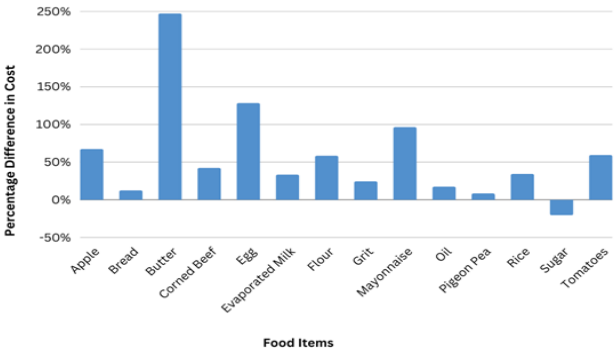

Figure 2 - Percentage Difference in Price of Food Items

Eggs (dozen) also increased in price over the 5-year time period, rising by 128 percent and resulting in a price difference of $2.70. Mayonnaise (oz) has a 96 percent increase and an average price difference of $0.17. Tomatoes (lb) increased in price by 59 percent with price difference $0.93, while flour (lb) shifted in price by an increase of 58 percent with price difference of $0.46. Additionally, corned beef (lb) and evaporated milk (lb) moderately increased by 42 percent and 33 percent respectively, with respective price difference of $1.20 and $0.41. Grits (lb) and oil (lb) have witnessed relatively small changes in price, with increase of 24 percent and 17 percent, and price difference of $0.24 and $0.34 respectively.

Presented in Table 4, an independent samples t-test of unequal variance (Welch's Test) was performed to examine the significance of changes in the price of food items over a five-year period. The results indicate that nearly all food items experienced a significant increase in price, with the exception of Grits and Pigeon Peas; the price of sugar decreased.

Table 4 - T-Test Test of Significance (Welch t-test) for price difference

	Mean		Difference in Mean	t-value, p
Food Items	2017	2023		
Apple	1.26	2.12	0.85	-3.86, <0.01*
Bread	2.74	3.49	0.32	-2.47, 0.02*
Butter	1.15	3.99	2.84	-3.74, < 0.01*
Corned Beef	2.83	4.03	1.20	-5.53, < 0.01*
Eggs	2.1	4.81	2.70	-7.72, < 0.01*
Evaporated Milk	1.25	1.67	0.41	-3.56, <0.01*
Flour	0.8	1.26	0.46	-5.63, < 0.01*
Grits	1	1.24	0.24	-1.53, 0.13
Mayo	0.18	0.35	0.17	6.23, < 0.01*
Oil	2.05	2.39	0.34	-2.16, 0.03*
Pigeon Peas	1.45	1.56	0.12	-0.87, 0.38
Rice	0.87	1.19	0.32	-4.99, < 0.01*
Sugar	1	0.8	-0.20	2.15, 0.04*
Tomatoes	1.57	2.5	0.93	-3.26, <0.01*

* p<.05

6. Discussion and Policy Implications

This study assessed the price, and difference in availability, of selected food items in Nassau, Bahamas. Our findings demonstrate a rise in the prices of food items over the past five years with the exception of sugar, which has declined. Additionally, the study highlights a decline in the availability of tomatoes and an increase in the availability of mayonnaise, with no changes in the availability of other staple items. These findings contribute to the existing body of knowledge on the challenge of food insecurity within the Caribbean nation.

The United States Department of Agriculture defines food insecurity as the state of having limited or uncertain access to nutritionally adequate and safe foods or facing challenges in acquiring acceptable foods through socially acceptable means (United States Department of Agriculture, 2022). The challenge of increasing food prices amidst declining availability and access further infringes on the fundamental universal human rights of food insecure individuals (Ayala & Meier, 2017). The availability of adequate, secure, and nourishing food has an impact not just on the well-being of individuals facing food insecurity but also on their capacity to effectively address health issues, thus aggravating the health crisis, and in some cases resulting in malnutrition and hunger. (Olson, 1999).

The government of The Bahamas has consistently strived to address food insecurity in the country, given its dependency on imports to feed its population. One of the early approaches by the government was to regulate the price of essential staple food items under the Price Control Act of 1971. Under this act, all retailers were mandated to charge no more than the set amount at a maximum set price. These items are commonly referred to as breadbasket and include: butter, cooking oil, mayonnaise, grits, cheese, corned beef, evaporated milk, margarine, rice, sugar flour, bread, tomato paste, and canned fish (Bahamas Department of Labour, 2011). With the increasing prices of food items globally, and in The Bahamas, the government reviewed and extended items on the breadbasket list in 2018 to include the following new items: baby cereal, baby formula, soups, broths, baby food, powdered detergents, condensed milk, soaps, fresh milk, and mustard. Out of the 14 food items included in this study, 12 of them are listed in the breadbasket, while only two items i.e. apple and pigeon peas are not included in the list. The absence of fruits and vegetables on the list has raised concerns and increased public demand for the inclusion of healthy food options in the breadbasket list (Wynen, 2020).

Findings from our study reveal significant increases in the price of all food items, except for pigeon peas and grits, which remained stable, and sugar which experienced a decline in price. Previous research has consistently demonstrated that rising food prices have a substantial impact on consumers' perceptions, lifestyles, and consumption patterns. As a result, many individuals are forced to make compromises in their food choices to adapt to these price increases (Karpyn et al., 2021). These compromises in consumption patterns have far-reaching consequences, particularly for socially and economically marginalized families. For some households, these compromises have led to health crises, increased levels of hunger and malnutrition (Cordero-Ahiman et al., 2018), poor academic performance (Weaver et al., 2020), and low school attendance (Tamiru & Belachew, 2017), among other challenges.

Recognizing that the effects of rising prices and limited food availability are most keenly felt at the household level, the government of The Bahamas has implemented several programmes including those that address the need for affordable chicken and locally grown produce. In February 2023, the government of The Bahamas launched the Golden Yolk Egg Production project with the goal of increasing local egg production from 750,000 to more than 27 million eggs per year by strengthening local capacity towards addressing food insecurity (The Government of Bahamas, 2023b). This project was undertaken with the objective of reducing the nation's reliance on imported eggs, as the country's food import bill amounted to $1 billion, with $12.5 million specifically spent on egg imports. Furthermore, the Bahamas Agriculture and Marine Science Institute (BAMSI) also commenced in April 2023 its poultry research and training centre, dubbed as the ‘Egg-cademy’ (Bahamas Information Services, 2023).

Additionally, in March 2020, the government of Bahamas also commenced the Backyard Gardening Program with the goal of bolstering food security within households. This program, administered by the Ministry of Agriculture and Marine Resources, provides participating households with backyard garden starter kits, including irrigation systems, seeds, seed trays, fertilizer, and enriched soil (Bahamas Information Services, 2021) The Backyard Gardening Program was launched in 2020 with a budget of $240,000, intended to purchase 10,000 gardening kits (McKenzie, 2020), enough for approximate ten percent of Bahamian households and continues to play a role in the agriculture strategy.

Despite the gains achieved through the various interventions of the government in mitigating the impact of rising food prices and limited availability, concerns for increased food insecurity still persist given the continued upward trend in the prices of essential food items, placing a significant burden on consumers. Furthermore, the noticeable decline in the availability of essential food items may further exacerbate the challenges faced by individuals and communities already grappling with food insecurity. Our study indicates that seven out of the 14 food items involved in this study became less available in 2023 as compared to their availability in 2017. For example, the availability of tomatoes across food stores declined by 26 percent, while the availability of apples also declined by 20 percent.

When the prevalence of food insecurity becomes severe, it is not without health implications. Studies have shown that food insecurity contributes to increased risks of depression and anxiety in mothers and behavior problems in their preschool-aged children (Whitaker et al., 2006). It has also been reported to increase oral health problems among the poor (Muirhead et al., 2009), Iron deficiency especially among children (Park et al., 2009) and women (Ghose et al., 2016), diabetes mellitus and other chronic diseases (Seligman et al., 2010; Hung et al., 2004). Additionally, severe food insecurity has been reported to push many food-insecure individuals in The Bahamas to change their pattern of food consumption as coping strategies. These strategies included restricting meals to a limited variety of foods and reducing intake of essential dietary components, particularly vegetables and fruits (Karpyn et al., 2021; (A. Kendall et al., 1996). Previous study conducted by Karpyn et al. (2021) reveals that the prevalence of moderate and severe food insecurity in The Bahamas was found to be 21 percent, with a specific prevalence of severe food insecurity at 10 percent. The study further identified factors that significantly contribute to food insecurity to include education, age, gender, and the presence of diabetes, high blood pressure, or heart disease.

Our study underscores the need for ongoing interventions to address food prices and food insecurity in The Bahamas. Additionally, efforts to strengthen the resilience of the local food system and reduce its reliance on foreign imports will enhance food security in the long term and holds the potential to reduce transportation price and improve the environment while keeping prices low for consumers. For example, by empowering households to grow their own food, the Backyard Gardening Program, has contributed to alleviating some of the strain caused by increasing prices and promote greater self-sufficiency in meeting nutritional needs. Such program could be complemented by promoting nutrition education and food literacy programs towards improving dietary choices, reduce malnutrition rates, and prevention of food wastes (Lee et al., 2022) (West et al., 2020). Policy efforts may also benefit from improving access to education and employment opportunities in the agriculture sector. Furthermore, establishing social safety nets, such as low or no price school meal programs that utilize local agriculture in the meals, conditional cash transfer programs for the most vulnerable citizens, and subsidized food programmes that focus on access to local fresh fruits and vegetables can provide critical support for those with very low income, the elderly and those with chronic health conditions.

Furthermore, the government should also intensify investment in modern agricultural techniques and infrastructures, and provide farmers with improved seeds, fertilizers, irrigation systems, and access to expertise to expand farming safely into new or underrepresented categories such as swine and mutton production. This will enhance agricultural productivity, reduce reliance on imports, and stabilize food prices. Additionally, continued support for small-scale farmers through training, financial assistance, and access to markets will enhance overall food production and decrease price volatility. With the Bahamas Agriculture and Industrial Corporation (BAIC), The Bahamas Agriculture and Marine Science Institute (BAMSI) and the Bahamas Agricultural Health and Food Safety Authority (BASHSFA) at the forefront of implementing the food security plans of the government, strengthening international partnerships with other countries and organizations towards facilitating knowledge sharing, technology transfer, and access to global markets, will offer valuable support in addressing food insecurity challenges.

Lastly, addressing policy and governance gaps by improving coordination among relevant stakeholders, and establishing monitoring and early warning systems are vital to ensure effective responses to food security threats and emergencies, including climate change and regional/global conflicts. Investing in climate-resilient agriculture and healthy agro-tourism practices will help adapt to climate change impacts and mitigate crop failures (Zwane, 2019) (P. Kendall & Petracco, 2009). By implementing these strategies, The Bahamas can make significant progress in achieving food security for its population.

7. Limitations

We focused specifically on core staple food items and did not explore prices in other food categories. It is important to note that prices in different food categories may fluctuate differently, and our findings may not be representative of the overall food market. Additionally, the stores selected for our study in 2017 are not necessarily the same stores included in the 2023 survey. While there may be some overlap, it is possible that certain stores closed and new stores opened in the intervening years. The emergence of the COVID-19 pandemic could have played a role in these changes, as it has had a significant impact on various industries, including retail.

8. Conclusion and Recommendations

This study provides an assessment of the availability and price change for staple products between 2017 and 2023 in Nassau, Bahamas. The findings indicate a significant rise in food prices over the past five years, but relatively stable food availability. The increased cost of food is likely to impact families' purchasing decisions in the grocery store and potentially their health. Future research should examine how food purchasing habits have changed in response to the increase in the price of food as well as impacts on household expenses.

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