Documenting 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, for growing food costs. The objective of this study was to investigate food availability and food 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. The cost of selected staple items was standardized to reflect the per unit cost and/or per pound cost of the items and then compared between years using t-test and, for availability, chi-squared statistics. Of the initial list of 6 products examined (Apples, Tomatoes, Cannes Pigeon Peas, Egg, Sugar, and White Bread) all demonstrated an increase in price on the shelf, ranging from an 8% increase in Pigeon Pea to a 128% increase in the cost of eggs. Overall these findings raise important questions about the cost of a healthy diet in the Bahamas.

Keywords: The Bahamas, food insecurity, food availability

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), on environmental challenges and increasing costs of food. According to the Food and Agriculture Organisation FAO, the growing trend of depending on food imports is a cause for concern in s 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 like St. Kitts and Nevis, as much as 95 percent of the available food is imported (Food and Agriculture Organisation, 2016). Similarly, in the Pacific region, the Cook Islands rely on imports for approximately 92 percent of their available food (Food and Agriculture Organisation, 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, 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% 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 1% 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% of its food products because of insufficient agricultural production. As a result, the cost 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% of the population of Nassau was food insecure in 2017, with 11% being moderately food insecure and 10% 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%) for the Caribbean as a whole.

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 cost inflation. (De Pee & Turowska, 2022; Food and Agriculture Organization, 2022; Bai et al., 2022). For example, the cost of food has increased by 9.9% in 2022, with a prediction of 6.6% 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%) compared to February of the same year.(Food and Agriculture Organisation, 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 cost 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 cost 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).

Materials and Methods

During the Spring of 2017, and again in Spring 2023, a convenience sample of 27 and 56 grocery stores, respectively, was identified in Nassau using the island phonebook. Trained data collectors from the University of Bahamas (2017) and BAMSI (2023) proceeded to visit 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. However, in order to improve regional relevance of the tool; items listed as part of the staple "Breadbasket" list were added to the tool (ie. 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 cost across different store pricing strategies (ie, cost per apple vs cost for a pound of apples), item prices were calculated after first considering package size, determining cost per common quantity (ie. gram or ounce) and then multiplying that standard unit to obtain the most common package size cost (400g butter, for example). Subsequently, descriptive statistics for all products were calculated and comparisons made between product cost in 2017 and costs in 2023. Similarly, product availability was determined between the 2 years and compared.

Tables

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%
Gritss	89%	96%	7%
Mayonnaise	89%	100%	11%
Oil	96%	91%	-5%
Pigeon Peass	89%	91%	2%
Rice	96%	100%	4%
Sugar	96%	93%	-3%
Tomatoes	89%	63%	-26%

Table 2: Changes in Cost of Food

Food Items	**2017 Average Cost ($)**	**2023 Average Cost ($)**	**Cost Difference ($)**	**Percentage Difference in cost**	**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

Table 3: Test of Significance (t-test) for cost difference

	Mean		**Difference**	
Food Items	**2017**	**2013**	**in Mean**	**t-value, p**
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
Gritss	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

**statistically significant difference at p<.05 or better*

Table 4 : Test of Significance on Food Availability (Chi-Squared)

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*

** significant*

Figure 1: Percentage difference in Cost of Food items

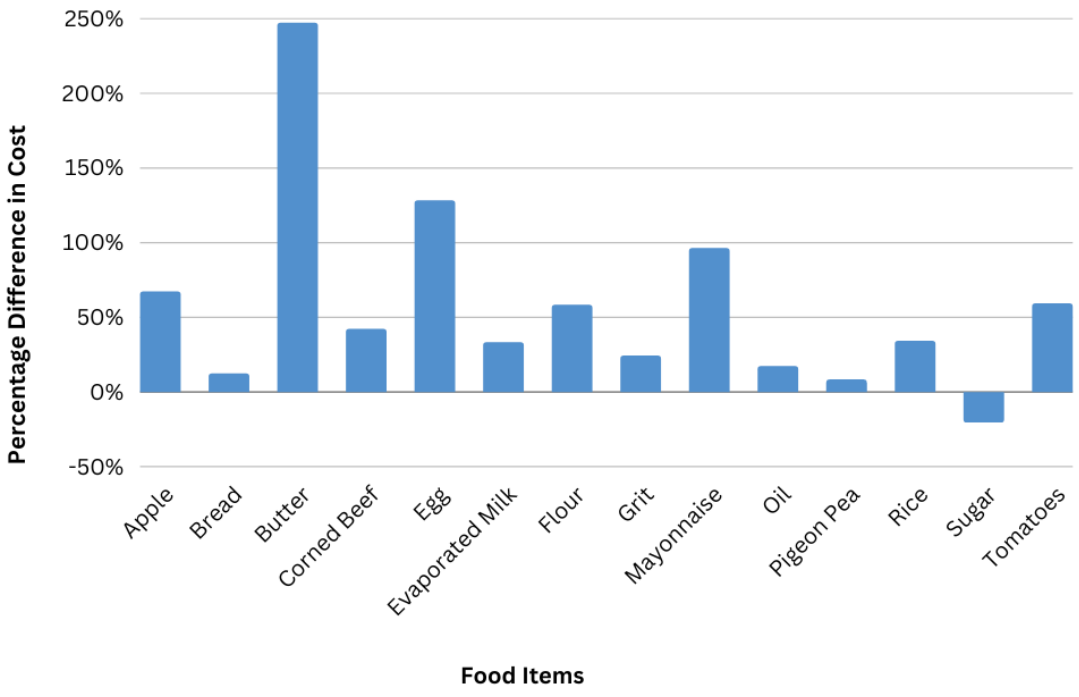
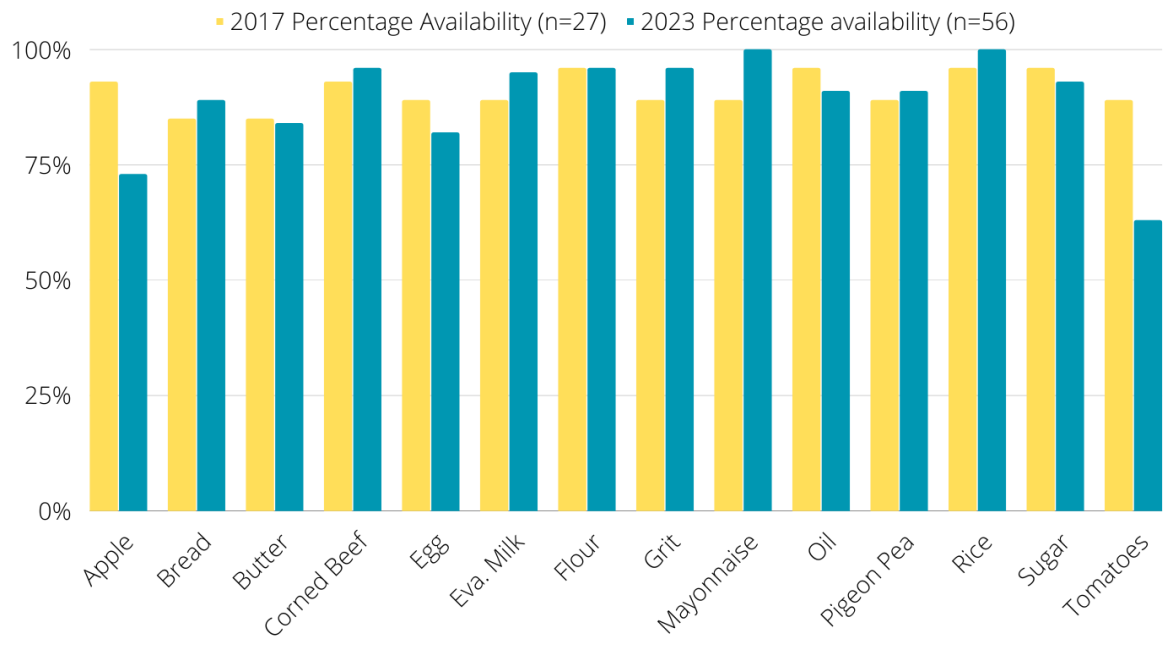


Figure 2: Percentage availability of food items.



Results and Discussion

The study conducted a comparison of the availability and cost of food items between 2017 and 2023. As indicated in Table 1, and Figure 2, findings of the study highlighted notable changes in the availability of various food items during this period.

Among the food items investigated, Table 4 demonstrates that there were statistically significant differences in the percentage availability of tomatoes (X^2 (1, N = 83) = 4.95, $p < .05$) and mayonnaise (X^2(1, N = 83) = 3.660, $p < .05$) between 2017 and 2023, as indicated by the chi-square tests. While not statistically significant there was a positive trend in the availability of bread, corned beef, evaporated milk, grits, mayonnaise, pigeon peas, and rice whereby more stores carried the items in 2023 as compared to 2017. On the contrary, certain food items experienced a slight decrease in availability over the same timeframe. Apples, butter, eggs, cooking oil, sugar, and tomatoes showed a non-significant decline in availability. The availability of flour remained constant throughout the five-year period.

Table 2 and Figure 1 provide an overview of the changes in cost 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 cost as well as the average cost difference for each item. Starting with fruits, the cost of apple (lb) shifted by an increase of 67%, with an average cost difference in the 5-year time frame of $0.85. Moving on to staple foods, a moderate increase in the cost of bread (lb) was observed, with 12% increase in average cost resulting in average cost difference of $0.32 from 2017 to 2023. The cost of rice (lb), another staple food, also increased by 34% with average cost difference of $0.32. Butter (lb) has witnessed the highest increase in cost, a 247% increase, with an average cost difference of $2.84. Pigeon peas (12 oz can) had the lowest increase in cost, with 8% increase and average cost difference of $0.12.

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

Presented in Table 3, a t-test was performed to examine the significance of changes in the cost of food items over a five-year period. The results indicate that all food items experienced a significant increase in cost, with the exception of Grits ($t(79.65) = -\$1.53$, $p = 0.131$) and pigeon Peas ($t(49.34) = -\$0.89$, $p = 0.38$) respectively.

The cost of apples in 2017 ($M = \$1.27$, $SD = 0.47$) significantly increased compared to the price in 2023 ($M = \$2.12$, $SD = 1.33$) ($t(59.06) = -\$3.86$, $p < 0.001$). Similarly, the cost of bread in 2017 ($M= \$2.74$, $SD= 1.31$) significantly increased in 2023 ($M=\$3.05$, $SD=1.38$) ($t(50.94) = -\$2.47$, $p=0.017$). In particular, the cost of butter in 2017 ($M = \$1.15$, $SD = 1.09$) exhibited a significant increase, reaching a considerably higher cost in 2023 ($M = \$3.99$, $SD = 2.92$). The t-test results showed a statistically significant difference in cost between time-points ($t(76.61) =-6.29$, $p < 0.001$).

Additionally, the cost of corned beef in 2017 ($M=\$2.83$, $SD= 0.93$) significantly increased in 2023 ($M=\$4.03$, $SD= 1.09$) ($t(27.03) =\$10.34$, $p < 0.001$). There was also a significant increase in the cost of eggs from an average cost in 2017 ($M= 2.10$, $SD= 0.44$) to a new average cost in 2023 ($M= \$4.81$, $SD= 2.53$). ($t(62.23) =-\$7.72$, $p < 0.001$). The change observed in the cost of evaporated milk is significant as the cost in 2017 ($M=\$1.25$, $SD= 0.52$) increased to a new average in 2023 ($M=\$1.67$ $SD= 0.56$) ($t(44.08) =-\$3.55$, $p= 0.000912$). Flour also increased significantly in cost from its average cost in 2017 ($M= \$0.80$, $SD= 0.21$) to a new cost in 2023 ($M= \$1.27$, $SD= 0.34$) ($t(79.30) =-\$5.63$, $p < 0.001$).

The average cost of an ounce of mayonnaise in 2017 (M= $0.18, SD=0.08) increased to (M= $0.35, SD=0.15) in 2023 a significant difference over the 5-year period ($t(80.7) = -6.23$, $p < 0.001$). Furthermore, a pound of cooking oil significantly increased in cost from (M= 2.05, SD= 0.59) in 2017 to a new average cost in 2023 (M= 2.39, SD= 0.74) ($t(76.61) = -6.29$, $p < 0.001$).

Specifically, the average cost of rice in 2023 (M= 0.87, SD= 0.30) shows a significant increase from its average cost in 2017 (M=1.19, SD=0.38) ($t(39.26) = -4.99$, $p < 0.001$). Similarly, the cost of tomatoes in 2023 (M=1.57, SD=0.72) significantly increased from its cost in 2017 (M=2.50, SD=1.60) ($t(63.09) = -3.26$, $p < 0.001$). However, a significant decrease in the cost of sugar was observed from its average cost in 2017 (M= SD=) to a new average cost in 2023 (M= SD=) ($t(76.61) = -6.29$, $p < 0.001$).

Discussion and Policy Implications:

This study assessed the cost, and difference in cost of selected food items in Nassau, Bahamas. Our findings unequivocally demonstrate a substantial rise in the prices of food items over the past five years with the exception of sugar which has declined. Additionally, the study highlights decline in the availability of certain food items such as apple, bread, butter, egg, oil, sugar, and tomatoes. These findings significantly 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 cost 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 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 have 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 cost of all food items, except for pigeon peas 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 costs 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 10% 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 costs and limited availability, concerns for increased food insecurity still persist given the continued upward trend in the costs 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 it availability in 2017. For example, the availability of tomatoes across food stores declined by 26%, while the availability of apples also declined by 20%.

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%, with a specific prevalence of severe food insecurity at 10%. The study further identified factors that significantly contributes 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 cost 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 cost 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.

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.

Conclusion and recommendations:

This study provides an assessment of the availability, cost, and cost differences in a subset of staple products between 2017 and 2023 in Nassau, Bahamas. The findings indicate a substantial rise in food prices over the past five years, accompanied by a decline in the availability of certain food items. This consistent upward trend in food prices is likely to impact on consumers, influencing their perceptions, lifestyles, consumption patterns, and health.

One of the ways to further understand the implications of the findings from this study is to conduct a follow-up qualitative study on how food purchasing habits have changed in response to the increase in the cost of food. Researchers can examine the intricate details and nuances of individuals' experiences and behaviors related to their purchasing decisions in the face of higher food prices. This approach would enable a more comprehensive exploration of the underlying factors and influences that contribute to changes in food purchasing patterns. Furthermore, ongoing longitudinal data collection of food prices annually both in Nassau and on the Family Islands is recommended.

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