Economic Analysis of Commodity Supply Chain and Pricing in Gaza Strip (01/12/2024 – 31/12/2024)

1. Introduction

The study analyzed six different commodities, including food and non-food items, across various locations in the Gaza Strip. This research was conducted from 1st December to 31th December 2024, and aimed to evaluate the pricing, trade continuity, and payment methods during the period of conflict. The selected items included: tomatoes, potatoes, rice, soap, sanitary towels, and cooking gas. Traders involved in the supply chain were categorized as: main traders, intermediary traders, and sales outlets (kiosks and stalls).

2. Sample Overview and Key Findings

The sample consisted of a 50% split between food items (tomato, potato, and rice) and non-food items (sanitary towels, cooking gas, and soap). Data about market prices are collected from the markets in both sides of Gaza Strip. In the southern side, prices were collected in the "humanitarian area", specifically in *Nuseirat*, *Deir al-Balah*, and *Khan Younis* markets. While in the Northern side, prices were collected in the main markets of Gaza city, *Al-Zawya* and *Al-Sahaba* markets. A total of 8 supermarkets and kiosks were surveyed across Gaza strip, with a mix of old traders and new traders that emerged due to market shifts during the war.

3. Key Findings:

- **Price increases**: Prices increase average is about **26%** compared to pre-war levels, with fluctuations based on supply availability and demand in each side of the Strip.
- Geographical price variations: Prices in Southern side of Gaza Strip were generally lower than in Northern Side primarily due to differing supply chains and geographical challenges.

• E-payment adoption:

According to a survey of a sample consisted of (40) selling points distributed equally between the north and south of Gaza Strip, regarding their acceptance and willingness to deal with E-payment methods, the results showed that, around 30% of surveyed merchants in South Gaza accept electronic payments, compared to 50% in North Gaza.

• Trader Categorization: Traders were divided into registered traders (those who were operating before the war) and new traders (who started their operations during the war due to business disruptions).

4. Geographical Breakdown

The study gathered data from both **North Gaza** and **South Gaza**:

• North Gaza: 4 sales outlets, including supermarkets and Stalls or kiosks from Al-Zawya and Al-Sahaba markets.

• South Gaza: 4 sales outlets, with traders from An-Nuseirat, Deir Al-Balah, and Khan Yunis.

These outlets provided a comprehensive snapshot of the Area's trade activities and price trends.

5. Pricing Dynamics and Trends

Price fluctuations were noted in the following key commodities during the study:

- Tomatoes: Prices dropped by 18% in some areas but rose by 15% in others due to supply shortages.
- Potatoes: Prices fluctuated between a 5% increase and a 15% decrease, influenced by transportation difficulties.
- Rice: Prices were relatively stable, with an 8% increase on average.
- Soap: Soap prices had a steady increase of 15% by the end of December.
- Sanitary towels: Prices varied significantly, with increases of up to 30% due to scarcity.

Table (1): time series of prices (South)

Period	From	То	Sanitary towels	Soap	Potato	Rice	Tomato	Cooking Gas
Period 01	01/08/2024	14/08/2024	12.43	24.71	11.93	5.50	7.36	7.13
Period 02	15/08/2024	28/08/2024	12.64	26.93	8.07	7.86	13.79	7.13
Period 03	29/08/2024	11/09/2024	12.50	25.64	12.14	9.43	20.00	7.13
Period 04	12/09/2024	25/09/2024	12.21	26.79	12.64	11.00	26.64	7.13
Period 05	26/09/2024	09/10/2024	14.07	18.93	16.79	11.86	34.43	7.13
Period 06	10/10/2024	23/10/2024	14.93	18.07	35.00	12.87	44.42	7.13
Period 07	24/10/2024	06/11/2024	15.50	18.07	56.64	14.21	52.86	7.13
Period 08	07/11/2024	20/11/2024	15.29	13.71	34.79	19.14	41.07	7.13
Period 09	21/11/2024	04/12/2024	22.00	9.71	34.23	26.29	41.79	7.13
Period 10	05/12/2024	18/12/2024	21.64	10.50	25.42	24.71	33.79	7.13
Period 11	19/12/2024	01/01/2025	20.00	8.57	23.21	23.50	26.00	7.13
Average of previous 10 periods	01/08/2024	18/12/2024	15.32	19.31	24.77	14.29	31.62	7.13
% Of Change			31%	-56%	-6%	64%	-18%	0%

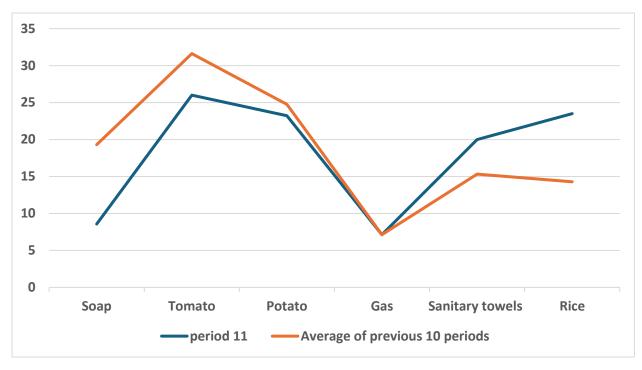


Figure (1): Comparing prices during the current period with the average of the previous 10 periods. (South)

From the data in the above table and figure, we notice that the prices of 3 out of 6 items decreased during the reporting period from their average prices during the previous 10 periods. Soap has the largest decrease of about 56%, followed by tomatoes by 18%, then potatoes by 6%. the prices of rice and sanitary towels increased by 64% and 31% respectively, while there was no change in the price of cooking gas, because the gas is distributed through a unified system through the Ministry of Social Development.

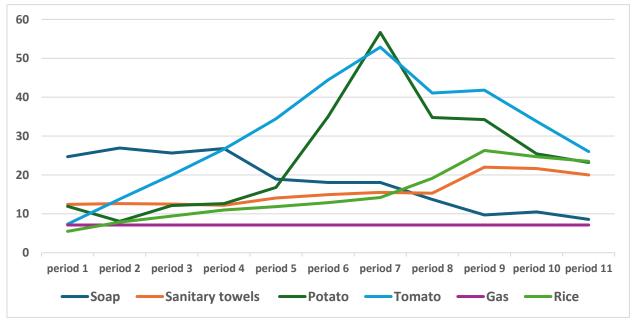


Figure (2): time series of prices (South)

We notice from the chart above that there is one item which price is stable throughout the period (cooking gas), and another item on a downward curve (soap). The remaining four items are on an upward curve, but they are divided into two types, two of them are on a normal upward curve (rice and sanitary towels), and the other two items (tomato and potato) were on a sharp upward curve that reached its peak in period number (7) and then began to gradually decline.

Table (2): time series of prices (North)

Period	From	То	Sanitary towels	Soap	Potato	Rice	Tomato	Cooking Gas
Period 01	01/08/2024	14/08/2024	9.21	7.07	110.00	45.00	209.00	NA
Period 02	15/08/2024	28/08/2024	9.21	7.64	115.00	45.00	200.00	NA
Period 03	29/08/2024	11/09/2024	10.14	7.57	136.00	42.86	250.00	NA
Period 04	12/09/2024	25/09/2024	11.00	7.71	118.57	43.21	193.33	NA
Period 05	26/09/2024	09/10/2024	11.14	11.07	68.64	51.43	224.00	NA
Period 06	10/10/2024	23/10/2024	10.79	12.50	80.00	45.00	230.00	NA
Period 07	24/10/2024	06/11/2024	11.36	12.07	105.71	48.93	184.00	NA
Period 08	07/11/2024	20/11/2024	13.57	12.57	102.27	39.55	170.00	NA
Period 09	21/11/2024	04/12/2024	13.93	12.50	62.14	41.67	119.09	NA
Period 10	05/12/2024	18/12/2024	14.43	12.29	62.00	32.86	126.67	NA
Period 11	19/12/2024	01/01/2025	13.64	11.71	41.79	30.83	90.00	NA
Average of previous 10 periods	01/08/2024	18/12/2024	11.48	10.30	96.03	43.55	190.61	NA
%	% Of Change			14%	-56%	-29%	-53%	NA

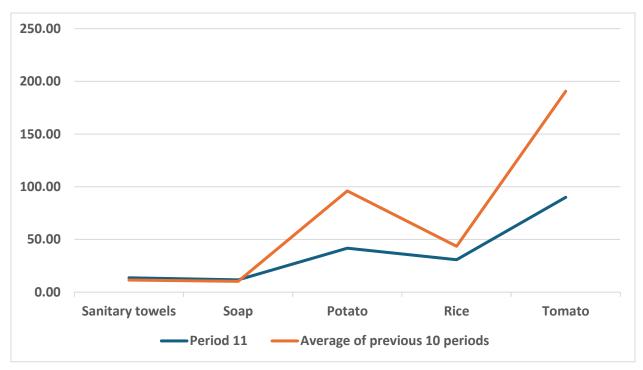


Figure (3): Comparing prices during the current period with the average of the previous 10 periods. (North)

From the data in the above able and figure, we notice that the prices of 3 out of 6 items decreased during the reporting period from their average prices during the previous 10 periods. Potato has the largest decrease of about 56%, followed by tomato by 53%, then rice by 29%. The prices of stationary towels and soap increased by 19% and 14% respectively, while there was no cooking gas available in the North during the reporting period.

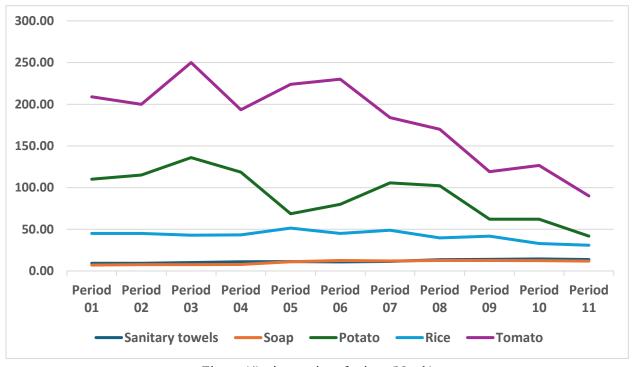


Figure (4): time series of prices (North)

We notice from the previous figure that the prices of soap, sanitary towels and rice are relatively stable and move sideways, while the prices of tomato and potato fluctuated sharply, but overall moved in a downward curve. Cooking gas is not available in the North.

Supply Chain Analysis

The supply chain was structured into three key levels:

- a. **Main Traders**: Receive goods directly from the crossings via different methods, often involving intermediaries.
- b. **Intermediary Traders**: Act as wholesalers, connecting main traders with sales outlets and kiosks.
- c. Sales Outlets/Kiosks: These are the retail points selling goods directly to consumers.

Due to supply disruptions, traders have had to contend with fluctuating prices. Some goods enter Gaza via special humanitarian channels, increasing costs significantly. Coordination fees for goods entering Gaza can range from **200,000 to 500,000 shekels**, depending on the nature of the goods.

6. Description of Shops/Kiosks

The shops surveyed were a mix of registered and new traders. Key observations include:

- New Traders: Many new traders opened kiosks after the collapse of their previous businesses. They generally sell basic goods, often at higher prices due to limited supply.
- Sales Model: Kiosk owners generally charge a 15% margin over the wholesale price, adjusting based on market conditions. Many of these owners are individuals who turned to trading due to limited income opportunities.
- Payment Methods: Electronic payments are becoming increasingly important. As mentioned above regarding the survey of 40 selling points, about acceptance of electronic payment methods, 40% of kiosks in An-Nuseirat accept electronic payments, 30% in Deir Al-Balah, and 25% in Khan Yunis. In North Gaza, around 50% of kiosks accept e-payments, driven by the liquidity crisis and the scarcity of usable cash.

7. Payment Methods

The two main payment methods used in Gaza are:

- Cash: Cash payments continue to dominate but have become challenging due to a lack of cash availability and high transaction fees.
- **E-payment**: E-payment methods have seen significant growth. A sample of (150) consumers in the above-mentioned markets, equally distributed between the north and south of Gaza Strip, were surveyed about their attitudes towards using E-payment methods in purchasing their daily needs from the markets. The results showed that, about **80% of consumers preferring electronic payments** (such as cards, bank transfers, and e-wallets) to avoid the high fees associated with cash transactions.

The **liquidity crisis** in Gaza has made cash transactions more difficult, leading to an increase in e-payment usage. As a result, there was a **26% increase** in the use of electronic payments compared to cash payments, for the same surveyed sample, compared to previous weeks.

8. Transportation Costs and Additional Security Escort Fees

Transportation costs are high due to security concerns. Traders importing goods from outside Gaza incur coordination costs and transportation fees. The coordination cost for a single truckload of goods entering Gaza is ranging from 200,000 – 500,000 shekels, and transportation and security escort fees to move goods from the crossing to warehouses can cost around 10,000 shekels. These additional costs contribute to price increases for consumers.

9. Impact of War and Economic Disruptions

The ongoing war has disrupted trade in Gaza, with supply chains severely impacted. The closure of financial institutions, the banning of private sector to enter goods, and the private sector resorting to enter limited and reduced amounts of goods through unofficial channels, have led to widespread price hikes. Traders have had to adapt to challenges in obtaining goods, contributing to higher prices and affecting the cost of living for many consumers.

10.Trader Categorization: New vs. Registered Traders and Trade Activity Changes

Traders were divided into two categories:

- **Registered Traders**: These traders were active before the war and have continued their operations despite challenges. They often rely on established supplier relationships to maintain their businesses.
- New Traders: New traders have emerged in response to the collapse of their former businesses. These traders typically work in smaller outlets, such as kiosks or stalls, which are more flexible in adjusting to changes in supply and demand.

11. Chamber of Commerce Membership and Trade Continuity

The membership in the **Chamber of Commerce** has played a crucial role in the continuity of trade. Traders who were registered members before the war were able to rely on their established networks, which helped them maintain business continuity. However, many new traders are not members of the Chamber of Commerce and have faced difficulties accessing resources and supply chains. To overcome these challenges, some new traders have formed alternative networks based on personal connections and institutional support.

12. Conclusion and Recommendations

The study highlights several critical challenges faced by traders and consumers in Gaza:

- **Price volatility**: Prices for essential goods have risen sharply, with some items increasing by as much as 30% due to supply shortages and transportation difficulties.
- **E-payment adoption**: Electronic payments have become increasingly important, growing by **26%** over traditional cash payments, especially in areas with limited cash circulation.
- **Supply chain disruption**: High costs related to coordination, transportation, and security fees have led to price hikes for consumers.

Recommendations:

- **Supporting better supply chains**: Expanding and improving the supply chain infrastructure will help mitigate price volatility.
- Expanding access to E-payment systems: Ensuring greater access to electronic payment systems will enable smoother transactions and support the growing preference for digital payments.
- **Assisting new traders**: Providing support to new traders to establish more reliable operations will help stabilize prices and encourage smoother market conditions.
- **Private sector essential role**: Allowing the private sector to import all types of goods, in appropriate quantities, in order to stabilize prices and make essential goods available to people, and contribute to accelerating the recovery process.