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# Commentary: From acute food insecurity to famine: how the 2023/2024 war on Gaza has dramatically set back sustainable development goal 2 to end hunger

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## A Commentary on

### From acute food insecurity to famine: how the 2023/2024 war on Gaza has dramatically set back sustainable development goal 2 to end hunger

by Hassoun, A., Al-Muhannadi, K., Hassan, H. F., Harnad, A., Khwaldia, K., Buheji, M., and Al Jawaldeh, A. (2024). *Front. Sustain. Food Syst.* 8:1402150. doi: 10.3389/fsufs.2024.1402150

## 1 Inaccuracies in reported prices and lack of source specification

Table 1 contrasts the food prices reported in Figure 5 of the original paper by Hassoun et al., together with the corrected prices sourced from PCBS and FPMA. The green rows show the price reported by Hassoun et al., which lacks proper source attribution in the published article. Below these, the prices sourced from PCBS and FPMA are shown. All prices are now presented as NIS per kilogram for clarity and consistency.

## 2 Food prices in the Gaza strip

In response to Hassoun et al., and to provide the most accurate price changes of food items crucial to the Palestinian diet, we have collected and analyzed prices in Gaza from January 2023 to September 2024, focusing on both locally produced and imported goods. We gathered information from various sources to ensure the reliability of the reported prices.

The ongoing conflict in Gaza has brought significant inflationary pressures, creating critical challenges for food security and affordability. From January 2023 to September 2024, essential food items have seen considerable price fluctuations, especially following the onset of regional hostilities in October 2023.

### 2.1 Food prices and post-conflict instability

In addition to correcting the wrongly reported items in the study by Hassoun et al., we also examined price trends for key food items, with a particular focus on

TABLE 1 Comparison of food item prices in the Gaza Strip (NIS<sup>a</sup>/KG) as reported by Hassoun et al. (in green) vs. figures sourced from PCBS and FPMA.

Item	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Source
<b>Fish (wrongly reported)</b>		30		120		NA
Fresh Malita fish—medium size	24.25	26.06	27.69	27.69	27.69	PCBS
Sultan Ibrahim fish—large	41.25	39.38	41.56	41.56	41.56	PCBS
Fresh mullet fish—large size	25.18	24.76	26.53	26.53	26.53	PCBS
Frozen Bakla fish (black with its head cut off)	11.83	10.67	10.5	10.5	10.5	PCBS
Frozen white fish filet	12	10.83	10.67	10.67	10.67	PCBS
<b>Mouton Meat<sup>b</sup> (wrongly reported)</b>		40		120		NA
Fresh lamb with bone—local	56	56.11	56.22	60	70	PCBS
Fresh lamb liver	52	50.6	52.6	52.6	62.6	PCBS
<b>Veal (wrongly reported)</b>		35		150		NA
Fresh veal—local	45.6	45.55	45.5	50	60	PCBS
Coarsely chopped fresh veal	45.27	45.53	45.53	50	60	PCBS
Fresh veal cubes “Lissan Asfour”	45.27	45.53	45.53	50	60	PCBS
Frozen veal—imported	24	23.57	23.57	30	33	PCBS
<b>Onion (wrongly reported)</b>		2		50		NA
Green onions—local	3.64	5.8	7.56	7.56	7.56	PCBS
Local dried onions	2.88	3.22	4.84	4	4.75	PCBS
Dry onions-Israel	2.75	3	4.63	4	4.75	PCBS
<b>Potato (wrongly reported)</b>		3		15		NA
Medium sized potato—local	2.56	2.52	3.28	5.5	13	PCBS
Medium sized potato—Israel	2.39	2.5	3.27	5.5	13	PCBS
<b>Rice (wrongly reported)</b>		6		35		NA
Long Grain Jasmine Rice Thailand—1 kg	7.41	7.59	8.71	8.94	12.94	PCBS
Sun White Australia short grain rice—25 kg	6.2	6.2	6.4	6.4	7.2	PCBS
Sun White short grain rice, Australia	9.75	9.82	9.82	9.82	13.82	PCBS
Long grain rice, basmati, Al Walima, produced in India, packaged or bagged	6.6	6.6	6.88	6.88	8.88	PCBS
Long Grain Jasmine Rice Thailand—5 kg	6.72	6.6	6.92	6.92	8.92	PCBS
Pioneer long grain basmati rice 1 kg	6.45	6.36	6.36	6.36	8.36	PCBS
Rice, long	6.45	6.36	6.36	6.36	8.36	FPMA
Rice, short	9.75	9.82	9.82	9.82	13.82	FPMA
<b>Wheat Flour (wrongly reported)</b>		Increase of 50%				NA
Haifa flour—premium white—Israeli	3.92	3.96	3.98	4	4	PCBS
White flour Haifa-Zero-Israel	2.98	2.98	2.98	2.98	2.98	PCBS
My wheat flour	2	2	2	2	2	PCBS
Extra white flour—Haifa—wheat flour—Israeli	3	3	3	3	3	PCBS
White flour—first toast—Turkish	2.5	2.5	2.5	2.5	2.5	PCBS
White flour—Al Salam Mills—local	1.81	1.84	2.71	4.09	16.5	PCBS
Al Salam flour—local—25 kg	1.8	1.84	3	4.25	16.5	PCBS
Al Salam flour, sweetened, 1 kg bag	3.13	3.1	3.78	4	16.5	PCBS
Wheat flour	3.92	3.96	3.98	4	4	FPMA

<sup>a</sup>We consider nominal NIS. While it is common to use real prices, nominal prices were used in the article due to anomalies in the reported real prices, particularly in October 2023, where values for several items approach zero NIS. This likely reflects a reporting error rather than actual market conditions. Given the relatively short time frame of the analysis, adjusting for inflation (deflating prices into real values) was deemed non-critical for capturing meaningful trends.

<sup>b</sup>Mouton meat is not a food item reported by neither PCBS nor by FPMA. We consider lamb to represent the most similar food item.

bread—a staple in the Palestinian diet—as well as other locally produced and imported goods. Between January and September 2023, bread prices generally remained stable within a range of 2.58–2.89 NIS. In October 2023, prices briefly dropped to a record low of 2 NIS in January 2024 before rising, peaking at 3.25 NIS by September 2024—a 12% increase since January 2023. Locally produced goods, particularly chicken meat and olive oil, experienced substantial price hikes after the onset of conflict. Chicken meat prices increased immediately from 16.5 NIS/KG in October to 21 NIS/KG in November and 29 NIS/KG in December. They then remained stable at a high level until dramatically surging to 48.9 NIS/KG by September 2024, an increase of 133%. Olive oil prices rose significantly, from 30.2 NIS/KG in late 2023 to 68.2 NIS/KG by September 2024, marking a 126% increase. Both increases suggest production difficulties, likely due to resource shortages combined with damaged agricultural lands and infrastructure (UNOSAT/FAO, 2024).

## 2.2 Price differences among imported staples

Prices for imported staples like short rice (imported from Australia) and semolina (imported from Israel) have risen significantly. Short-grain rice, for example, increased from 9.82 NIS/KG in October 2023 to 13.8 NIS/KG by September 2024—a 40.5% rise. Semolina prices also climbed, peaking at 21.2 NIS/KG in March 2024 before slightly stabilizing. The price of long-grain rice (imported from the USA), however, has remained quite stable and is now slightly lower compared to the pre-war period, both in local currency and USD.

Sugar prices experienced sharp volatility post-conflict, rising from around 4 NIS/KG in November 2023 to a peak of 54.5 NIS/KG in March 2024. The price then decreased dramatically between June and August, to a low 5.6 NIS/KG, before rising again to 18 NIS/KG in September 2024. As sugar is reported to be imported from the EU, these abrupt changes reflect international trade disruptions and local scarcity.

## 2.3 Wheat flour and milk prices

Wheat flour, imported from Israel and a crucial component in bread production, has shown relative price stability, increasing only slightly from 3.9 NIS in early 2023 to around 4 NIS more recently. In terms of USD, prices show a slight decrease. The prices correspond to wheat prices in Israel, suggesting that wheat distribution to consumers has not been significantly affected by the war.

Milk, which is also primarily imported from Israel, saw prices double from 6.45 NIS pre-conflict to 12.8 NIS by April 2024. In Israel, prices have slightly increased since the beginning of the war, while local milk production dropped drastically.<sup>1</sup>

<sup>1</sup> According to the Israeli Ministry of Agriculture, the Israeli agricultural sector has been experiencing labor shortages and low production since the beginning of the war.

This suggests a halt in milk exports to the Gaza Strip, which would have contributed to keeping prices stable in Israel.

## 3 Impact on conclusions

The article by Hassoun et al. rightfully emphasizes the worsening food insecurity in Gaza due to the ongoing war since October 2023. However, it reports inaccurate information, and mistakenly highlights price increases in food items that are not central to the common Gazan diet (Horino et al., 2024). Items such as fish and veal, which are wrongly reported to have experienced extreme price hikes, hold relatively little importance in the daily diet of the Palestinian population. The focus on these less critical items distracts from the real and pressing issue: the significant volatility in the price of bread and the overall increase in staple foods, both play a crucial role in the diet of Palestinian households, especially for poorer families.

In conclusion, Hassoun et al. reports food price data inaccurately, which raises significant concerns regarding the validity of their findings on food insecurity in Gaza. The misreporting of price data misleads readers and distorts the overall conclusions drawn about food security during the 2023 war on Gaza. In addition, focusing more closely on bread and other staple foods may have helped provide a more accurate depiction of the food insecurity crisis in Gaza, especially in relation to poor and vulnerable populations that rely heavily on these foods.

## Data availability statement

The datasets generated for this study can be found in:

- PCBS: Microdata Catalog, Palestinian Central Bureau of Statistics (<https://www.pcbs.gov.ps/PCBS-Metadata-en-v5.2/index.php/catalog/?page=1&ps=15>).
- FPMA: Food Price monitoring and analysis (FPMA) tool. Monitoring and analysis of prices, Retail (NIS/kg) (<https://fpma.fao.org/giews/fpmat4/#/dashboard/home>).
- Israel Bureau of Statistics, Database of Prices and Price Indices (<https://www.cbs.gov.il/en/Statistics/Pages/Generators/Database-of-Prices-and-Price-Indices.aspx>).
- Bank of Israel, Representative Exchange Rate US dollar/New Israeli shekel (<https://edge.boi.gov.il/?locale=en>).

## Author contributions

RZ: Data curation, Conceptualization, Writing – review & editing, Writing – original draft. JC: Writing – review & editing.

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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