



Vegetable and Fruit Wholesale Markets as an Effective Tool for Transforming the Food System in Jordan

FoSTr Policy Brief No. 5

Key messages

- Wholesale markets are vital to food system transformation and represent significant points for intervention. Enhancing their efficiency and effectiveness can increase farmer profitability, reduce losses, lower consumer costs, and ensure food safety and quality.
- Wholesale markets face several inefficiencies, weaknesses, and inequalities – including high fees on traded commodities, the wholesale market profits are spent mostly in urban areas, poor quality assurance, deteriorating infrastructure, weak governance, and significant food loss – all of which undermine market efficiency.
- Municipalities may resist changes to the wholesale market system due to concerns about losing a portion of their profits.
- Farmers and consumers are underrepresented in wholesale market boards.
- Restructuring wholesale markets with alternative models and diversified approaches is essential to promote fairness, efficiency, and sustainable food system transformation in Jordan.

Introduction



This policy note is part of a series prepared by the Foresight for Food Systems Transformation (FoSTr) Programme,¹ aimed at equipping decision-makers, politicians, researchers, and practitioners with relevant data, insights, policy tools, and recommendations to foster a shared understanding of critical issues concerning food system transformation. The need for these policy notes arose following FoSTr workshops following FoSTr workshops and other relevant events during 2022–2024, where stakeholders emphasised this issue, highlighting the lack of awareness and necessary interventions. This policy brief is intended to act as a diagnostic and issues paper rather than a detailed analytical document, ensuring it meets its purpose effectively.²



Why focus on the role of vegetable and fruit wholesale markets? VFWMs play a crucial role in the food supply chain, enabling large-scale trading and distribution of fresh produce between producers, distributors, and retailers. These markets operate on a business-to-business (B2B) model, facilitating the efficient movement of perishable goods from farms to sales points, like grocery stores and restaurants.



In Jordan, fruit and vegetable production significantly contributes to the country's economy and population well-being. The total land planted with fruits and vegetables is 1.245 million dunum (du),³ producing annually around 2.507 million tons.⁴ Wholesale markets are vital for food security, serving as key hubs in the flow of fresh produce from farm to fork. However, little effort has been devoted to improving these markets over the past two decades.⁵

Research approach and methods

Given the brief nature of this policy note, which focuses on summarising policy issues related to VFWMs in Jordan, the methodology used was primarily consultative – including a literature review, meetings, and consultations with policy and subject matter experts.

Two visits were conducted to Amman and Irbid VFWMs, and two meetings were held with the Assistant Deputy Minister for Marketing and his staff. Data was gathered from the Ministry of Agriculture, VFWMs, and the Department of Statistics. FoSTr experts, wholesale market management, the Ministry of Agriculture, and the policy and planning committee of the Food Security Council reviewed the first draft of the study. This policy note was then presented at the FoSTr workshop for further review and comments.



¹ The FoSTr programme covers four countries in Africa, Asia, and the Middle East. It provides Jordan with a country support facility for food systems foresight and scenario analysis. The country-led and multi-actor foresight process aims to assist stakeholders in their contributions to national food systems transformation. It supports the dialogue, analysis, and understanding necessary for co-creating future food systems that are sustainable, healthy, equitable, and resilient.

² Verified Market Reports (2024, April 7). Wholesale Fruits and Vegetables Market Size, Future Growth: Shaping the Future with Forecasted Growth and Trends for 2024–2031. LinkedIn. <https://www.linkedin.com/pulse/wholesale-fruits-vegetables-market-size-future-growth-zozdc/>

³ A dunum equals 1,000 m² or 1/10 of a hectare.

⁴ DoS, 2023.

⁵ Amman's present wholesale market was established in 1995.

Analysis and key findings

In 2022, 47.8% of locally grown vegetables and fruits passed through wholesale markets, with Amman receiving 70% of the total, Irbid 22%, Arda 5%, and Zarqa 3%.⁶ Marketing costs vary significantly across products; for example, the marketing cost of tomatoes accounts for 78% of the farm gate price, while strawberries is around 10%.⁷

Several stakeholders play a key role in the performance of VFWMs and overall food system transformation. However, each group has differing perspectives, and interests often conflict – creating challenges in planning and implementing the desired food system transformation.

In light of field visits to VFWMs and interviews with stakeholders, the key functions of these markets can be summarised as follows: i) weighing, unloading, and loading of produce; ii) quality control; iii) sorting and grading; iv) cooling and storage; v) auctioning; vi) hosting other institutions, such as the Ministry of Agriculture; vii) quality assurance; viii) fee collection; ix) data collection; x) issuing reports, i.e., the daily commodity price bulletin; xi) maintenance, waste collection, and cleaning; xii) security and guarding; xiii) managing traffic and parking; and xiv) identifying the size and weights of produce containers.

Other stakeholders have the following roles:



The public sector focuses on several key roles: i) developing and endorsing policies, strategies, and plans; ii) providing the regulatory and institutional framework; iii) food safety and quality assurance; iv) provision of services such as finance, subsidies, research, extension, and veterinary services; v) negotiating bilateral trade agreements and representing Jordan in international fora; and vi) establishing and managing information systems.



The private sector's roles include: i) producing vegetables and fruits; ii) managing and administering the markets; iii) handling import, export, and internal trade; iv) providing finance, inputs, grading, packing, transportation, and cooling and storage facilities; and v) engaging in food processing.



Civil society organisations play a vital role by: i) protecting and lobbying for farmers' and consumers' interests; ii) organizing farmers and other stakeholders into groups; and iii) representing stakeholders in public and private sector organizations and committees.



All VFWMs in Jordan operate under the regulation of the Local Administration Law No. 22 of 2021. Two specific by-laws stem from this law: one governing the Greater Amman Municipality (GAM) and another for the rest of Jordan's municipalities. These laws provide the framework for establishing and managing VFWMs, while the by-laws specify tasks and responsibilities for GAM and other municipalities. Notably, the fees charged by GAM are higher than those of other municipalities because the decision of fees is taken separately; for GAM and for other municipalities. Nevertheless, the cost of marketing is more in Amman wholesale market than the wholesale market in other governorates.

⁶Agricultural Statistics Report 2022, MoA.

⁷Agricultural Prices Study/Administrative Data from the central markets.



The major challenges

The major challenges facing VFWMs are outlined below, along with suggested recommendations to address each issue.



Unequal distribution of profits: Wholesale market profits, derived from fees paid by farmers, go to urban municipalities. Only recently has 10% of these profits been allocated to the risks and calamities fund that compensate farmers in case of risks and calamities. Overcoming this inequity could be achieved by reducing wholesale market fees or managing the market as a cooperative or not-for-profit organisation. Another consideration would be to allow farmers to become shareholders in the wholesale market.



Outdated facilities: Many market facilities, including market areas, auction platforms, and cooling and storage areas, are old and have limited capacity. Investments from municipalities or by sharing with private sector to allow for periodic improvement and maintenance, or relocating markets to new areas, are both potential options for improvements.



Unfair fees: The high fees charged by VFWMs disproportionately affect farmers, especially when produce prices drop. To create a fairer trading environment, recommendations include reducing wholesale market fees and allocating part of the VFWM profit to support farmers.



Impact on exports: Mandatory fees for exported goods passing through VFWMs reduce the competitiveness of Jordanian produce in export markets. To enhance competitiveness, a special area for exports could be allocated at the wholesale markets, or a dedicated export market could be established. Allowing farmgate or border checks for export products is also another option.



Low quality of sorting, grading, packing, and transportation facilities: Inadequate facilities negatively affect product quality, resulting in food loss and reduced farmer income. To help improve facilities and minimise related losses, regulations regarding to sorting, grading and packaging systems could be regularly reviewed and enforced by government in close consultation with private sector to serve farmers in clusters or local areas may also be established. Efforts to increase farmer awareness on environmentally and safety methods of packaging and improve agricultural extension to use new technology of sorting and grading systems could also prove beneficial by decreasing the losses.



Lack of market intelligence: There is no market intelligence system for local or export markets, which limits the decision-making abilities of both farmers and exporters in respect of choosing the best markets to sell the products to get the highest price. Improved awareness could be achieved through the establishment of a market information and intelligence system, and ensuring farmers, retailers, and exporters are trained in using this. To establish the market intelligence system, the integrated efforts from government and private sectors should be commixed.

Implications of challenges

- In 2022, 48% of locally produced vegetables and fruits were traded at wholesale markets. Nearly all exports pass through these markets, with Arda market specifically limited to exports.
- Wholesale market laws prohibit the sale of locally produced and imported vegetables and fruits outside of VFWMs.
- Marketing margins are relatively high, reaching up to 44% for tomatoes when compared to total costs, and constituting 78% of the crop's farmgate price. In contrast, strawberries have a much lower margin of about 10%.
- Communication and information sharing among farmers, retailers, and dealers about wholesale market prices is weak.
- High levels of food loss occur at VFWMs due to oversupply and rejected produce.
- Some dealers provide input and finance to farmers on the condition that farmers sell their products exclusively through those dealers.
- Wholesale markets are very crowded, making access by farmers increasingly difficult.
- The average net income per ton at Amman Wholesale Market is around JD 12.
- Multiple stakeholders have differing interests in the VFWM system, meaning it is essential to make the best compromises when developing solutions and options of the different obstacles and problems regarding the marketing process of the products.

Policy recommendations

The following recommendations have been derived from the discussions in this note to guide the transformation of the VFWM system into an efficient, modern, and equitable model:

- ◆ Review the Local Administration Law, GAM Law, and municipal laws to enable cooperatives, non-governmental organisations, non-for-profit companies, and the private sector to establish wholesale markets. Moreover, explore the possibility of establishing VFWMs in Free Zones and Development Areas.
Actors responsible: Ministry of Local Administration, Greater Amman Municipality, Ministry of Agriculture, Food Security Council, Jordan Cooperatives Organisation.
- ◆ Conduct a detailed study on the requirements, feasibility, and impacts of restructuring and modernising VFWMs in Jordan, including assessing potential interests and finance options.
Actors responsible: Greater Amman Municipality, Ministry of Agriculture.
- ◆ Leverage other countries' experiences in establishing and managing modern VFWMs.
Actors responsible: Greater Amman Municipality, Ministry of Agriculture, wholesale dealers.
- ◆ Support the establishment of modern auction, packing, cooling, and inspection facilities at local and national levels, in addition to modernising the transportation fleet.
Actors responsible: Ministry of Agriculture; Ministry of Industry, Trade, and Supply; Ministry of Transport; Jordan Agricultural Credit Corporation; commercial banks; cooperatives; the private sector.
- ◆ Promote and facilitate short supply chains from producers to consumers, while ensuring food safety and quality standards. Conduct a detailed study on the requirements and potential impacts of parallel marketing.
Actors responsible: Ministry of Agriculture, Ministry of Local Government, GAM, Farmers' Union, Consumer Protection Agency, Jordanian cooperatives.

Conclusion

The VFWM system in Jordan plays a significant role in food system transformation. However, it is far from being efficient and effective, and it fails to secure equal benefit sharing across food value chain actors. The requirement for all traded fruits and vegetables to pass through the wholesale market creates a major distortion, highlighting the need for diverse approaches, alternative models, and durable solutions.

This note outlined the challenges facing the system and explores the potential to minimise and overcome them. With profit margins reaching JD 15 million in the Amman wholesale market alone, coupled with the fact that less than half of locally produced vegetables and fruits are traded at wholesale markets, it is evident that most profits come at the expense of farmers. This situation calls for urgent restructuring to promote efficiency and fairness, and to accelerate the transformation of Jordan's food system.



Note about policy brief authors

This policy brief was written by Walid Abed Rabboh (FoSTr country facilitator), Asem Nabulsi (FoSTr deputy country facilitator), and Prof. Mohammad Majdalawi (Department of Agricultural Economics and Agribusiness, University of Jordan) under the [Foresight for Food Systems Transformation](#) (FoSTr) programme. FoSTr supports Jordan with a facility for food systems foresight and scenario analysis. This country-led, multi-actor process aims to foster dialogue, analysis, and shared understanding to co-create sustainable, healthy, equitable, and resilient food systems.

References/Footnotes

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² Verified Market Reports (2024, April 7). Wholesale Fruits and Vegetables Market Size, Future Growth: Shaping the Future with Forecasted Growth and Trends for 2024-2031. *LinkedIn*. <https://www.linkedin.com/pulse/wholesale-fruits-vegetables-market-size-future-growth-zozdc/>

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⁵ Amman's present wholesale market was established in 1995.

⁶ Agricultural Statistics Report 2022, MoA.

⁷ Agricultural Prices Study/Administrative Data from the central markets.

⁸ Authors' own estimation

