RESEARCH ON PALESTINIAN WOMEN IN AGRICULTURE AND VALUE CHAIN IDENTIFICATION

Research on Palestinian Women in Agriculture and Value Chain Identification

LEARNING AND WAY FORWARD

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ABBREVIATIONS

Agriculture Value Chains	AVCs
Applied Research Institute Jerusalem	ARIJ
Country Gender Assessment of the agriculture and rural sector	CGA
Economic and Social Commission for Western Asia	ESCWA
Farmers Associations	FA
Focus Groups Discussions	FGDs
Food and Agriculture Organization	FAO
Gaza Strip	GS
Gender Units	GUs
International Fund for Agriculture Development	IFAD
Land and Water Settlement Commission	LWSC
Ministry of Agriculture	MoA
Ministry of Social Development	MoSD
National Agricultural Research Centre	NARC
National Agricultural Sector Strategy 2017–2022	NASS
Non-Governmental Organizations	NGOs
Organization for Economic Co-operation and Development	OECD
Palestinian Businesswomen Association	Asala
Palestinian Central Bureau of Statistics	PCBS
Palestinian Land Authority	PLA
Small and Medium Enterprises	SMEs
Small Enterprise Center	SEC
Socio-Economic & Food Security Survey	SEFSec
The Agricultural Cooperatives Union in Palestine	PACU
The Agricultural Development Association	PARC
The Convention on the Elimination of all Forms of Discrimination Against Women	CEDAW
Cooperatives Work Agency	CWA
The Palestine Fair Trade Association	PFTA
the Palestinian Working Woman Society for Development	PWWS
The Union of Cooperative Societies for Saving and Credit in the West Bank	UCASC
UNDP Human Development Index	HDI
United Nations Conference on Trade and Development	UNCTAD
United Nations Development Programme	UNDP
United Nations Industrial Development Organization	UNIDO
United Nations Office for the Coordination of Humanitarian Affairs	OCHA
West Bank & Gaza Strip	WBGS
Women's Centre for Legal Aid and Counselling	WCLAC
World Health Organization	WHO

EXECUTIVE SUMMARY

This research examines the role of Palestinian women in agriculture, analyzing their contributions, challenges, and opportunities within agricultural value chain (AVCs) in Palestine. By identifying promising AVCs, the research seeks to integrate gender equality objectives into agricultural development, fostering sustainable economic inclusion for women. The findings serve as a foundation for future gender-responsive initiatives, capacity-building programs, and interventions aimed at reducing social and economic barriers for women in agriculture.

MOWA collaborates with various ministerial units—including legal, strategy, planning, finance, and gender equality departments—to ensure effective implementation of gender-responsive policies, aligning with Palestine's broader economic development priorities.

The general objective is to strengthen institutional gender mainstreaming and promote equitable agricultural development. The specific objectives (SOs) include:

- SO1: To strengthen the capacities of the Palestinian gender equality machinery to effectively apply gender mainstreaming in the institutional processes of policy making, planning, budgeting and service provision, including with regards development cooperation interventions.
- SO2: To implement gender mainstreaming in the agricultural thematic cluster by taking technology into consideration, particularly regarding the analysis, management and monitoring of qualitative and quantitative indicators.

This research was conducted in **two phases**: the **initial phase** and the **in-depth analysis phase**. **The initial phase**: focused on developing the research framework, incorporating: literature review to assess existing studies and reports, questionnaire design for structured data collection, stakeholders mapping to identify key sector actors, cooperatives identification to ensure relevant engagement, and consultation with experts for analytical insights. **In-depth Analysis phase**: focused on primary data , including: field visits to women cooperatives and women's groups, focus groups, and interviews with key informants including experts, gender -sensitive value chain analysis to assess potential for integration, focus groups, and primary data collection to validate findings, and data analysis and reporting to generate insights and recommendations.

Key Challenges Facing Women in Agricultural Value Chains:

Women farmers and processors and cooperatives face deepening social and economic exclusion, exacerbating poverty risks. Key challenges include: (i) Limited land ownership and mobility, restricting access to financial resources and markets. (ii) Unrecognized labor, preventing fair compensation for their agricultural contributions. (iii) Limited access to modern agricultural technologies, hindering productivity improvements. (iv) Restricted exposure to market information, reducing competitiveness and profitability. (v) Patriarchal societal structures, reinforced by political instability, limited access to essential services, and weak legal protections[1].

Institutional Barriers for Women-Led Cooperatives:

- Palestinian women-led cooperatives face significant structural limitations, including[2]:
- Restricted financial access, hindering investment in modern farming techniques, branding, and market expansion.
- Exclusion from profit-generating segments, confining women to production and processing roles, while men dominate marketing, distribution, and sales.

[1] FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en
[2] Social Institutions and Gender Index (SIGI) – OECD, 2019. Global Report: Transferring challenges into opportunities

- Political instability, including land expropriation, settlement expansion, and resource control, worsening economic prospects.
- Deep-rooted patriarchal norms, reinforcing legal and institutional barriers that prevent women from leading and expanding agricultural enterprises.

Strategies to Strengthen Women-Led Cooperatives:

To support women's participation and expansion in agricultural value chains, key recommendations include:

- Hiring skilled staff and providing upskilling programs.
- Investing in modern production equipment and improving technology access.
- Expanding access to financial services and credit facilities.
- Enhancing packaging and branding strategies for domestic and international markets.
- Developing strong market linkages to facilitate trade expansion and cooperative growth.

High-Potential Agricultural Value Chains (VCs) for Women-Led Enterprises:

This research identifies **four promising VCs** with strong potential for economic growth and gender inclusion**:**

1. Dried Herbs (e.g., Za'atar)
2. Makdous (stuffed and pickled eggplants)
3. Freekeh (green roasted wheat)
4. Maftoul (Palestinian couscous)

Among these, Za'atar and Makdous are widely produced by women-led cooperatives, while Freekeh and Maftoul remain less common. These value chains offer opportunities to enhance local economies, create employment, and advance women's economic empowerment.

Key Interventions for Value Chain Development:

To improve **women's participation in agricultural value chains**, recommended interventions include:

- Technical training in food safety, industry standards, and product certification.
- Knowledge-sharing initiatives focused on best practices and expertise development.
- Financial literacy programs to strengthen business acumen.
- Leadership training to enhance women's role in decision-making and cooperative governance.
- Networking platforms connecting women-led enterprises to broader market opportunities.
- Agricultural extension services to provide practical skills and sustainable farming knowledge.

Recommended Value Chains per Governorate:

The following table presents key agricultural value chains identified for development, along with nodes in the value chain and proposed interventions:

Table 1: Identified and Recommended Value Chains (VCs)

Governorate	Product Value Chain	Nodes in the Value Chain	Proposed Interventions
Tubas	Dried Herbs (Za'atar, chamomile, turmeric, ginger), Fresh Herbs, Labaneh & Cheese	Marketing & Market Linkages	Capacity-building, branding development, technology investment, cold storage for dairy
Tulkarm	Honey (75%), Makdous (50%), Za'atar & Pastries (25%)	Marketing & Market Linkages, Access to Production Inputs	Access to finance, updated technology, branding, input support, infrastructure rehabilitation, product testing

Jenin	Mixed Za'atar (33.33%), Pickles & Labneh (20% each), Additional: Honey, Makdous, Freekeh, grape leaves	Input Supplies, Marketing & Market Linkages	Technology investment, production efficiency training, market expansion, certifications
Qalqilya	Tomato Paste (40%), Olive Oil, Frozen Vegetables, Kharoub Molasses	Marketing	Market linkages, greenhouse rehabilitation, supply chain development

Conclusion and Way Forward:

Strengthening women's participation in agricultural value chains through targeted policy frameworks, cooperative support programs, and financial inclusion mechanisms is essential for ensuring equitable economic growth. By implementing skills training, market access improvements, and financial inclusion strategies, Palestine's agrifood sector can drive women's empowerment, sustainable development, and economic resilience.

CHAPTER 1: INTRODUCTION

1.1 Background: Agriculture Sector

Agriculture is a critical sector in the West Bank, providing employment and sustaining local economies. The agriculture sector's contribution to GDP declined from 6.32 percent in 2021 to 5.75% in 2022 (PCBS, 2022), significantly lower than the global average of 10.29 percent (World Bank, 2023). In 2021, the value-added from agriculture was approximately USD 980 million. Women contribute significantly to primary production, processing, and agrifood trade, yet they face systemic barriers limiting their access to land, financing, market opportunities, and decision-making roles. These challenges reduce their economic potential and undermine the overall sustainability of agricultural value chains (AVCs).

The FAO Policy on Gender Equality 2020-2030 (2021) proposes a twofold strategy to achieve gender equity in rural and agricultural sectors—gender mainstreaming and women-targeted interventions. Despite efforts to implement gender-sensitive policies, political instability, resource limitations, and cultural constraints continue to restrict women's full participation in the agricultural economy[3].

1.2 Agricultural Market Dynamics and Gender Disparities

Agriculture remains a key export sector in the West Bank, generating USD 85.6 million in 2021, with 79.8% of exports originating from Palestinian farms. Major exports include Medjool dates, fresh produce, olive oil, and dried herbs, primarily sold to Israel, Türkiye, the United Kingdom, and the UAE. However, high import dependency on Israeli produce saturates local markets with lower-cost alternatives, undermining Palestinian farmers' ability to compete.

Women farmers face additional challenges in agrifood trade, including:

- Limited access to financial resources for business expansion.
- Lower profitability due to gendered pricing practices and expectations for discounts.
- Restricted mobility, limiting engagement in regional and international markets.
- Cultural norms preventing leadership roles in mixed-gender cooperatives.

1.3 Contribution to Policy and Market Development

This research integrates insights from key stakeholders—including women's cooperatives, agricultural associations, governmental bodies, and national/international organizations—to provide comprehensive recommendations for advancing gender equality in Palestine's agrifood sector. By leveraging both primary and secondary data, the research highlights women's contributions beyond subsistence farming, emphasizing their roles in market-oriented crop cultivation, processing, and trade.
Through targeted interventions and policy reforms, women farmers can gain greater economic agency, improved market access, and enhanced participation in agricultural leadership, ensuring a more equitable and sustainable agrifood sector in the West Bank.

1.4 The Role of Women and women-Led Cooperatives in Agricultural Value Chains

Women play a vital role in farming, agrifood processing, logistics, and sales, representing 17.1% of the workforce in the West Bank (PCBS, 2023) [4]. However, they remain disproportionately employed in informal labor, with limited ownership of farmland, financial resources, and technical training. Mobility restrictions further inhibit access to economic opportunities, while traditional gender norms confine women

[3] FAO, 2021: COUNTRY GENDER ASSESSMENT OF THE AGRICULTURE AND RURAL SECTOR, RAMALLAH, PALESTINE

[4] **Palestinian Central Bureau of Statistics, 2024**. Data base of Labor Force Survey, 2015-2023. Ramallah-Palestine

to low-skilled, physically demanding work with minimal decision-making power[5]. This confinement perpetuates cyclical disadvantages, limiting women's role to low-skilled, physically demanding labor with minimal decision-making power or control over revenues. Currently, only 1.8 percent of women in agriculture serve as employers. Expanding women's agency is essential for fostering more meaningful participation in the industry[6].

Despite these challenges, women-led cooperatives and agrifood enterprises present an opportunity for economic empowerment, enabling women to participate across the entire agricultural value chain—from production to processing and marketing. Studies indicate that targeted interventions, such as gender-responsive policies, financial inclusion programs, and agricultural training, can significantly enhance women's productivity and market presence. Recent studies highlight the importance of women-led VCs in Palestine, demonstrating how targeted interventions can enhance economic empowerment. For example, initiatives focusing on snake cucumber (faqouss) farming have successfully increased women's access to agricultural opportunities and improved their income. Additionally, research on rural women in the Northen West Bank (NWB) underscores how modernization and settler colonial policies have reshaped traditional agricultural roles, affecting women's social and economic status.

1.5 Objectives and Scope of the Research:

This research seeks to enhance women's participation in agricultural Value Chains (VCs) in Northern West Bank Governorates (NWBGs) by identifying challenges, opportunities, and institutional support mechanisms. The research specifically aims to:

- Conduct a gender-sensitive analysis of women's engagement in agriculture.
- Assess the products of women-led cooperatives, evaluating their alignment with national agricultural priorities.
- Examine existing AVCs to determine their potential for economic empowerment and gender equality.
- Identify barriers and opportunities for enhancing women's market access and employment stability.
- Evaluate the capacity and needs of women-led cooperatives to inform policy interventions.
- Analyze the economic potential of two promising AVCs, assessing their ability to strengthen women's economic participation.
- Provide recommendations for programming strategies aimed at supporting women's empowerment through value chain development.

1.6 Research's Structure:

This research explores women's roles and inequalities in the agriculture sector, identifies promising agricultural value chains (AVCs), and proposes measures to address women's specific needs and priorities. The research draws findings from a literature review and empirical data collected from key informants. This research is divided into six chapters along with an executive summary and annexes.

		Executive Summary
Chapter	1	Introduction: This chapter offering an overviews of the economic significance of the agriculture sector in Palestine, women's participation in agriculture and agro-food processing, key challenges that hinder women's access to land, resources, and economic opportunities, the value chain. It provide a summary about agricultural market dynamics and gender disparities, contribution to policy and market development. It present the rle of women in AVCs. It outlines the purpose and objectives of the research. Finally, it present the report structure.

[5] AMENCA 3 Gender Strategy, https://www.dfat.gov.au/sites/default/files/palestinian-territories-amenca-3-design-framework-annex-2.pdf
[6] AMENCA 3 Gender Strategy, https://www.dfat.gov.au/sites/default/files/palestinian-territories-amenca-3-design-framework-annex-2.pdf

Chapter	2	Research Methodological Approach: This chapter details the method used, including: Desk Review – Analyzing existing literature, reports, and policies relevant to the research topic. Stakeholders Mapping Exercise – Identifying and assessing key actors in the sector to understand their roles and influence. Primary Data Collection – Conducting surveys, interviews, and field visits to gather firsthand insights. Data Analysis – Applying qualitative and quantitative methods to interpret findings and extract meaningful conclusions. Gender-Sensitive Value Chain (VC) Analysis – Examining gender dynamics within agricultural value chains to identify disparities and opportunities for inclusion. Recommendations – Developing evidence-based strategies to enhance women's participation and equity in agricultural development.
Chapter	3	Desk review and Analysis: This chapter provides an overview of agriculture and agro-food sector in Palestine, focusing on: Agricultural Sector Trends – Growth patterns, market dynamics, and economic contributions. Role of Women in Agriculture – Participation, barriers, and empowerment initiatives. Informal Sector – Small-scale farming, unregistered cooperatives, and their economic impact. Agro-Food Sector – processing industries, value chain development, and export potential. Identified Agricultural Value Chain: this chapter provides an overview of the agriculture VC and marketing, highlighting challenges affecting women's engagement. Key areas covered: (i) Agricultural Value Chain Overview – Production, processing, distribution, and market integration. (ii) Marketing Strategies – Market access, pricing structures, and competitive advantages. (iii) Challenges for Women in Agriculture & Value Chains – Addressing barriers such as: Limited access to land, financial resources, and technology, Exclusion from decision-making and high-profit segments of the value chain, Institutional and societal constraints affecting participation and empowerment, Market access difficulties, including branding, distribution, and pricing challenges. Key stakeholders – Government agencies, cooperatives, NGOs, private sector actors, and international organizations working to advance agricultural development.
Chapter	4	Primary Survey of Women Led Cooperatives in the Northern West Bank. This chapter presents an in-depth analysis of the surveyed cooperatives covering: Legal classification – formal registration and legal status. Length of operation- duration and sustainability of cooperative activities. Membership dynamics – Participation rates, and inclusivity. Geographical distribution – Mapping cooperatives across NWBGs. Cooperative Structure –governance models and decision-making processes. Major challenges –obstacles faced by cooperatives and women entrepreneurs. Employment figures & gender representation – workforce size and leadership diversity. Value Chain (VC) participation – role of cooperatives within broader agricultural value chains. Support Structures – available financial assistance, business development services, and networking opportunities.
Chapter	5	Recommendations: This final chapter provides policy and programmatic recommendations to enhance women's participation in agricultural value chains, focusing on: • Strategies for economic empowerment. • Institutional reforms to support women-led cooperatives. • Financial inclusion and access to resources. • Improving market opportunities and competitiveness for women farmers
		Annexes: supporting documents, data tables, methodologies, and supplementary information.

CHAPTER 2: RESEARCH METHODOLOGICAL APPROACH

This chapter outlines the methodological framework used to assess the environment of women agricultural cooperatives, focusing on constraints, obstacles, and opportunities. The research aims to evaluate women's roles in agriculture and cooperatives and identify promising VCs for integrating women into the economy. To achieve this, the research employs a combination of secondary and primary data collection methods, designed to develop practical recommendations that enhance women's participation in the agriculture sector by fostering gender-responsive promising VCs. The key elements of the methodology: (i) **Desk Review** – Analyzing existing studies, policies, and reports on women in agriculture. (ii) **Stakeholder Mapping** – Identifying key stakeholders influencing agricultural cooperatives and value chains. (iii) **Primary Data Collection** – Conducting field surveys, interviews, and focus group discussions with cooperatives and experts. (iv) **Gender-Sensitive Value Chain (VC) Analysis** – Examining gender dynamics within agricultural production, processing, and marketing. (v) **Data Analysis** – Applying qualitative and quantitative methods to interpret findings and generate evidence-based insights. (vii) **Recommendations Development** – Formulating strategic interventions to improve women's access to resources, decision-making power, and market opportunities.

2.1 Desk Review

The process of examining secondary data to identify gender inequalities and gaps within the agricultural sector involved collecting and assessing existing documentation as part of a preliminary investigation. This objective was to consolidate relevant information already available on agriculture in Palestine. The desk review analyzed studies developed by various organizations to determine the extent to which key issues were addressed, included, and promoted within national, regional, and international documentation (e.g., data, policies, strategies).

The Consultant conducted an extensive review of existing research, gathering relevant data and information from both local and international official sources. These sources included:

- **UN Agencies:** Reports and data published by organizations such as the Food and Agriculture Organization (FAO), the United Nations Conference on Trade and Development (UNCTAD), and the United Nations Industrial Development Organization (UNIDO).
- **Government Sources:** Data from key bodies, including the Palestinian Land Authority (PLA), the Palestinian Central Bureau of Statistics (PCBS), and the Land and Water Settlement Commission (LWSC).
- **Independent Research Centers:** Resources from institutions such as the Applied Research Institute Jerusalem (ARIJ).
- **Civil Society and Women's Organizations**: Reports and studies from organizations such as the Palestinian Working Woman Society for Development (PWWSD) and the Women's Centre for Legal Aid and Counselling (WCLAC).

In addition to these sources, the Consultant reviewed reports on land ownership, access to resources, and women's decision-making roles within the agricultural sector. This data collection, complemented by other primary research tools, provided a comprehensive foundation for assessing women's role in agriculture and informing strategic interventions.

2.2. Mapping Exercise

The mapping exercise centered on profiling women-led agricultural cooperatives and conducting actors' analyses for a comparative gender study. The process involved stakeholder assessments to identify the constraints and challenges faced by both men and women. Conducted within a gender framework, the mapping aimed to ensure the accuracy of collected information and refine the data as necessary.

2.2.1 Identifying Key Stakeholders

The exercise mapped primary actors and stakeholders involved in gender equality, women's economic empowerment, and social dimensions. It covered the following key areas: (i) Agricultural cooperatives landscape, (ii) Regional and international entities, (iii) Governmental bodies, (iv) Private sector representatives, (v) Trade unions and councils, (vi) Professional organizations, (vii) Entrepreneurs (viii) NGOs. This mapping also led to the identification of cooperatives and their roles (see annex), followed by a filtering process to determine active agricultural cooperatives in the NWB.

2.2.2 Identifying Active Agricultural Cooperatives in the West Bank

- Updated data from CWA 2023 annual report on registered cooperatives indicates that the number of cooperatives in the WB governorates has reached 688. This total number is divided equally between 344 operating cooperatives and 344 non-operating cooperatives.
- According to the same report "CWA 2023 annual report", the results related to the distribution of cooperatives by gender showed that the highest percentage was for mixed cooperatives, as they constituted 64% of the total registered cooperatives in the WB only, followed by **cooperatives in which all members of the general body are males at a rate of 24.9%, then women's associations, which constituted the smallest percentage at 10.9%.**
- **In terms of the distribution of agriculture cooperatives operating by economic activity,** the agricultural sector tops the list at **44.99%, with 166 cooperatives (including 16 in GS)**. This reflects farmers' interest in improving their competitiveness in the local market and in working cooperatively to better market their own products.
- The agricultural sector constitutes the largest sector in most governorates, with the number of agricultural associations in some governorates far exceeding the number of associations in other sectors, constituting 60% of the total number of cooperatives across various sectors. Examples of this are the governorates of Jenin, Tubas, Salfit, and the Gaza Strip.
- According to Cooperative Work Authority. (2024). Annual Report of the Cooperative Work Authority for 2023 - Palestine. Ramallah, Palestine, **it estimates 150 operational agricultural cooperatives in the West Bank in 2023**

The sampling process followed a structure approach, consisting of several key steps:

1. **Inventory Compilation: Farmers' cooperatives and groups across** the six NWBGs were inventoried using multiple sources (e.g., Ministry of Labor and Small Enterprise Center database). Field visits were conducted to verify the active groups engaged in traditional food VCs.
2. Exclusion of Non-Active Cooperatives: Non-active cooperatives were eliminated to maintain a targeted focus on active organizations, particularly women-led cooperatives involved in agricultural and agro-food production.
3. Product Prioritization: Agro-food products were selected based on significant production shares and market relevance, both locally and internationally.

This structured process ensured a clear focus on active cooperatives and high-value product chains, ultimately strengthening women's participation in agricultural value chains.

2.2.3 Identifying Active Agricultural Cooperatives Operate in the NWBGs

The sampling process followed a structured approach, consisting of the following key steps:

1. Inventory Compilation: An inventory of farmers' cooperatives and groups operating in the six NWBGs was compiled using multiple sources, including the Ministry of Labor and the Small Enterprise Center database. Field visits were conducted to verify active groups engaged in traditional food VCs.
2. Exclusion of Non-Active Cooperatives: Non-active cooperatives were eliminated, ensuring a focused selection of active cooperatives, with special attention given to women-led cooperatives involved in agricultural and agro-food production.
3. Prioritizing Agro-Food Products: Agro-food products were selected based on production significance and market relevance, both local and international markets. Key products included: Olive oil, Thyme/Za'atar, Dried herbs, Freekeh, Maftoul, Honey, Pickles, Pickled olives, and Dairy products.

The final list of cooperatives was categorized by geographical distribution. A table detailing active cooperatives by governorate has been prepared to provide a clear overview of their roles and contributions within the selected value chain *(see annex 1)*

Table 2: Distribution of Registered Operational Agricultural Cooperatives in the Northern West Bank Governorates, 2023

Governorates	No. of Agricultural Operational Cooperatives in the Northern Governorates	Ratio from in total number of operational cooperatives (150) in the WB	Total number of members of Agricultural Cooperatives in the NGWB
Jenin	20	13.4 percent	1812
Tubas	16	10.7 percent	723
Tulkarem	12	8.0 percent	1871
Nablus	17	11.4 percent	1434
Qalqiliya	7	4.7 percent	235
Salfit	10	6.7 percent	1164
Total	**82**	*Represents 54.9 percent of total registered operational agricultural cooperatives in the West Bank*	***7239***

Data from CWA Annual Report 2023[7], Calculations by the Consultant

Based on data in the table above from the general assemblies of cooperatives in the West Bank8, there are 82 operating agricultural associations with a total of 7239 members.

2.3 Primary Survey and Data Collection:

Primary data collection was conducted to address gaps identified through the literature review, utilizing interviews with cooperatives and experts to obtain comprehensive insights.

2.3.1 Interviews with cooperatives:

The primary survey, supplemented by semi-structured interviews with experts, aimed to gather both qualitative and quantitative data. This approach was designed to: (i) identify key challenges affecting women-led cooperatives. (ii) explore potential solutions for sustainable growth. (iii) examine products offerings and roles within promising VCs. **Target Population:** The survey focused on active cooperatives

[7] Cooperative Work Authority. (2024). Annual Report of the Cooperative Work Authority for 2023 - Palestine. Ramallah, Palestine.

[8] AMAN, December 2021 Governance of Agricultural Cooperatives in Palestine, Report No. 198

and women's groups operating in agriculture and agro-food sectors across the six NWBGs. **Timeline:** Data collection took place between 15 January and 25 February 2025. **Survey Scope:** A total of 60 cooperatives and women's groups were approached, with 40 interviews successfully completed. The distribution of responses across the six governorates provides valuable insights into activity levels and preferences:

- Jenin- 18 responses, accounting for 45 percent of the total.
- Tulkarm- 7 responses (17.5 percent).
- Qalqilya- 5 responses (12.5 percent).
- Salfit- 5 responses (12.5 percent).
- Tubas- 3 responses (7.5 percent).
- Nablus- 2 responses, equating to 5 percent.

The survey results indicates a strong concentration of cooperatives activity in **Jenin**, with significantly lower representation across other governorates. This survey and interview process provided critical insights into the operations, challenges, and preferences of agricultural cooperatives. The findings serve as a valuable foundation for developing interventions to support and empower women-led cooperatives in NWB.

Table 3: Distribution of surveyed cooperatives across governorates in the northern West Bank

Governorate	Cooperative	Sample Share
Jenin	18	45 percent
Nablus	2	5 percent
Tulkarm	7	17.5 percent
Tubas	3	7.5 percent
Salfit	5	12.5 percent
Qalqilya	5	12.5 percent

2.3.2 Focus Group Sessions

In February 2025, as part of the research methodology, four focus group sessions were conducted with women-led cooperatives and agricultural groups to collect qualitative insights on their experiences within agrifood value chains. These sessions provided a platform for discussion, highlighting challenges, opportunities, and recommendations to strengthen women's participation in agriculture. SEC staff conducted five focus groups in Salfit, Jenin and Ramallah, where these groups were initiated by women to produce several products they have in common, follows a brief about each focus group.

At All focus groups sessions, the consultant followed the same methodology, using semi-structured inquiry methods, whereby participants were given the chance to express their opinions and share insights on topics of interest, such as women's safety in the workplace, women's economic empowerment, retention, and gender-responsive policies. The FGDs for all groups were analyzed and findings were triangulated to produce a comprehensive understanding of the insights collected.

Table 4: List of Focus Groups Sessions

Name of cooperative	Location	Date
Hakaya Al-Hiraf i	Salfit	17 February, 2025
Kofrdan women group ,	located in Kofrdan to the east of Jenin	10 February, 2025
The women's group in Bruqin	Burqin, Jenin	11 February , 2025
Al-Jalama Women's Center	Al-Jalameh- Jenin	13 February, 2025

1. Branding Needs: The groups require a logo, product design, and labels to enhance their brand identity.
2. Online Marketing Issues: They are facing difficulties in effectively marketing their products online.
3. Product Development and Packaging: There is a necessity for improved product development and packaging to enhance presentation.
4. Machinery Requirements: To boost productivity and ensure quality production, they need several types of machines,
5. a lack of necessary funding to purchase certain raw materials, as prices are high and they are not consistently available
6. Marketing and E-Commerce: Struggles with effectively promoting products online.
7. Cost of Machine Rental: High expenses associated with renting machines for producing pickles and tomato sauce.

2.3.3 Consultation Interviews with Experts:

In February 2025, a total of 10 consultation interviews were conducted with self-employed individuals and experts -both women and men- actively engaged in the agro-food sectors across the West Bank. These consultations provided valuable insights into the sector's dynamics, highlighting barriers, growth potential and strategic intervention to enhance women's participation and cooperative success with the agro-food industry.

Table 5: List of Interviewed Experts

Expert Name	Current Position
Mazen Masoud	Consultant expert
Izzat Zeidan	Development Consultant expert
Adnan Zidan	Market research expert
Awni Ellari	Cooperatives Business development consultant
Nazeih Qaryouti	Business linkages expert
Ashraf Ali	Programming development and value chains expert
Haya Jouhari	Business Development Expert
Muna Sobuh	Small Business Development Expert
Emily Jaber	Gender Expert
Odai Qabaja	Digital Marketing and e- Commerce expert

The interviews revealed several critical challenges faced by the agro-food sector and women-led cooperatives:

- Capacity Building- There is a continuous need for equipping cooperatives and individuals with the skills required to navigate evolving market demands effectively.
- Market Access- Expanding access to local and international markets remains a priority, necessitating robust marketing strategies and strong partnerships.
- Sustainability through Institutionalization- Strengthening the institutional framework within the cooperative ecosystem is essential for long-term growth and development.
- Operation and Maintenance Agreements- Experts emphasized the need for robust agreements to preserve and enhance existing outcomes, ensuring continuity and efficiency.

Additionally, experts highlighted the importance of integrating women-led cooperative models into the Palestinian landscape, which could: (i) Diversify economic opportunities for women. (ii) Enhance income sustainability for cooperative members.
By addressing structural challenges and building effective support systems, women-led cooperatives could play a pivotal role in strengthening both the agricultural and economic sectors.

2.4 Value Chains Identification

This research employs a participatory approach to identify promising agricultural value chains (AVCs) that integrate gender equality objectives and enhance women's economic participation in Palestine's agrifood sector. The methodology follows a structured process: **Step 1: Define Selection Criteria**: (i) Assess women's engagement across different stages of the value chain. (ii) Identify the availability of raw materials and production inputs. (iii) Analyze products currently produced by women-led cooperatives. (iv) Evaluate market demand and trade potential for local and international expansion. (v) Consider women's expertise in agricultural activities and production processes. (vi) Determine opportunities for integrating more women into key value chains. (vii) Ensure economic, environmental, and social sustainability of selected value chains. **Step 2: Conduct Data Collection & Analysis**: (i) Perform a literature review to examine previous studies and policy frameworks. (ii) Engage experts and practitioners to gather industry insights. (iii) Hold focus group discussions with women-led cooperatives to understand challenges and opportunities. (iv) Conduct cooperative surveys to collect firsthand data on production levels, financial constraints, and market accessibility. **Step 3: Evaluate Existing Value Chains**: (i) Develop a list of key agricultural value chains in the Northern West Bank Governorates (NWBGs). (ii) Discuss and assess the relevance of these value chains with experts, focus groups, and women's agricultural groups. (iii)Align findings with national agricultural priorities set by the government to validate feasibility. **Step 4: Select High-Potential Value Chains**: (i) Prioritize value chains with strong economic viability and market demand. (ii) Ensure selected value chains support gender equality and integrate women's participation. (iii) Identify promising agricultural products for cooperative-based development.

By following this **structured approach**, the research ensures that women-led cooperatives can **maximize their role in agribusiness**, enhance **market access**, and contribute to **sustainable economic growth**.

2.5 Developing Recommendations

Based on the GSVCA findings, the research focuses on developing **practical recommendations** and proposing **specific interventions** to strengthen women's roles and contributions within agricultural value chains. These recommendations aim to: (i) ensure equitable participation in the sector, (ii) unlock growth opportunities for women in agriculture, and (iii) address systemic barriers that hinder women's economic engagement.

CHAPTER 3: IN DEPTH DESK REVIEW AND ANALYSIS

3.1 The Palestinian Agriculture and Agro-Food Sectors

3.1.1. A Brief Overview of Agriculture Sector:

To provide a comprehensive description of the agriculture sector, the following key component are covered:

A- Economic contribution:

The agriculture sector is a vital component of Palestine's economy, contributing to employment, food security, and rural livelihoods. Agriculture is key sector of the Palestinian economy, yet its contribution to GDP has declined, dropping from 6.32 percent in 2021 to 5,75 percent in 2022 (PCBS, 2022). The figures is significantly lower than the global average of 10.29 percent (World Bank, 2023). The value-added from agriculture in 2021 was approximately USD 980 million[9]. Employment in agriculture accounts for 6.1 percent of total employment, supporting livelihoods. However, in many regions, agriculture accounts for 10-30% of total employment, depending on economic structure. Women make up a considerable share of agriculture workers, often engaged in small-scale farming, food processing, and informal sector. Employment includes role in crop cultivation, livestock management, agribusiness irrigation services, and market distribution. Agriculture supplies local markets, ensuring food security and supporting domestic consumption. Agriculture remains an important export sector, generating USD 85.6 million in 2021, with 79.8 percent originating in the West Bank (WB). Key export markets include[10]: Israel (27 percent), Türkiye (11 percent), United Kingdom (10 percent), United Arab Emirates (7 percent). The primary agriculture exports are: Fresh Produce, Medjool Dates, Fresh & Dried Herbs, and Olive Oil. Despite its important, the WB imports a majority of its fruits and vegetables from Israel, flooding local markets with cheaper produce, which undermines Palestinian farmers and restricts access to vital resources[11]. The sector is closely linked to agrifood processing industries, such as dairy, olive production, and preserved goods. The dependence on imported fertilizers, seeds, and irrigation equipment affect production costs and profitability.

B- Agriculture Production:

The Palestinian agriculture sector is characterized by diverse crop production[12], including:

1. *Overview of Major Crops, Livestock and Agrifood Industries*:

Crops Production: *Olive trees*- a cornerstone of Palestinian agriculture, production high-quality olive oil. Over 11 million olive trees cultivated across Palestine. *Cereals & Grains*- wheat, barley, and Freekeh are widely cultivated, covering approximately 30,000 hectares. *Fruits*- citrus fruits (orange, lemon), grapes, figs, and dates are key exports. *Vegetables*- tomatoes, cucumber, eggplants, and onions are commonly grown. *Herbs & Spices*- za'atar (thyme), chamomile, and mint are essential to traditional agriculture.

Livestock Production: Animal farming plays a vital role in rural economies. Supporting livelihoods through: *Sheep & Goats*- used for dairy products, meat, and wool. Over 700,000 sheep and 215,000 goats recorded in Palestine. *Cattle Farming*- contributing to the production of fresh milk and meat, with approximately 40, 000 dairy cows contributing to the sector *Poultry Farming*- a growing industry supplying eggs and chicken meat, producing over 200 million eggs annually. Beekeeping- honey production is an emerging sector with export potential, with 300 metrics tons per year.

Food Processing Industries: The agrifood sector is expanding with processing industries that add value to raw agricultural products: *Olive oil processing*- Palestine is known for its premium -quality olive oil, produced through traditional and modern methods, with around 20,000 metric tons of olive oil annually. *Dairy processing*- cheese, yogurt, and labaneh production are significant contributors to the food industry, with milk production exceeding 250,000 metric tons per year. *Pickling & Fermentation-* Makdous (stuffed eggplants), pickled vegetables, and olives are widely produced. *Grain & flour milling*- processing wheat

[9] https://tradingeconomics.com/palestine/gdp-from-agriculture
[10] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023
[11] Philippe Pernot, Ramallah, May 21, 2024 News MENA: Under siege: Palestinian women and youths find solace in agricultural co-operatives. https://www.thenationalnews.com/news/mena/2024/05/21/palestine-agriculture-farming-west-bank/
[12] Palestinian Central Bureau of Statistics (PCBS) Agriculture Census 2021 here and Crop Production Statistics

for bread, Freekeh, and Maftoul (Palestinian couscous). *Herbs & spices blending*- za'atar and other dried herbs are processed for local and export markets. The agro-processing industry is a significant contributor to the oPt economy, employing approximately **24,000 workers** across **4,500 agrifood companies**. Most agrifood companies are small businesses, with an average of **5.3 employees per company**. Palestinian agrofood systems involve key stakeholders who play a vital role in moving agrifood commodities from farmers to consumers while providing essential inputs and working capital to farmers. According to the Palestinian Central Bureau of Statistics, an estimated 1,565 agricultural wholesalers and retailers were officially registered in the West Bank in 2010, though no estimates exist for informal traders.

Traders are categorized into three groups: Wholesalers: They purchase agro-products directly from farmers, local markets, or other wholesalers and then sell these products to intermediaries. Wholesalers also offer marketing services, including sorting, grading, storage, and product transportation between markets. **Retailers:** They buy agro-products from wholesalers and sell directly to end-consumers, managing their own transport or hiring intermediaries to facilitate delivery. **Agents/Intermediaries**: These individuals work on behalf of farmers to market their products. While the farmers retain ownership, the agents earn commissions for their services. Approximately 60 percent of Palestinian farmers utilize central wholesale markets or other sales channels to connect with consumers, relying on wholesalers, distributors, and retailers. Around 38 percent of farmers bypass wholesalers by selling their produce directly to local traders or processors, which significantly impacts trade in wholesale markets. For instance, the Tulkarem central market only receives 20 percent of local production, while local goods account for just 8 percent of the trade in the Hebron wholesale market. A small fraction of farmers—just 2 percent—export their products. For processed foods, the predominant sales channels include distributors and agents (33 percent) or wholesalers and intermediaries (33 percent). Farmers typically retain only 30–35 percent of the final selling price after deducting input costs. Wholesalers add an average markup of 10–15 percent, while retailers claim approximately 40 percent of the consumer price[13]. Agricultural cooperatives remain underdeveloped, often lacking the expertise and skills required to help farmers optimize their market returns. Key challenges include insufficient marketing infrastructure, such as inadequate packaging facilities, refrigerated storage, and transportation for perishable goods. These limitations result in significant post-harvest losses and restrict opportunities for exports, which are further hampered by financial and logistical constraints. A variety of institutions contribute to the development of the agricultural sector. Ministries, public institutions, and 35 non-governmental and civil society organizations collaborate with the Ministry of Agriculture on initiatives like land reclamation, agricultural road construction, and water harvesting. The private sector also plays a crucial role in the agricultural value chain by investing in production and post-harvest activities, while being the sole entity involved in agrofood processing.

The Importance of the Food Processing Industry: The food processing industry in the oPt has witnessed steady development, particularly in the production of dairy products, olive oil, and pickled goods. Many of the inputs, such as cucumbers, dates, tomatoes, eggplants, almonds, and grapes, are sourced locally, which has been welcomed by farmers and stakeholders. The industry's growth has beneficial spillover effects on other sectors, further enhancing its significance. However, the increasing population and rapid urbanization have placed significant pressure on the agricultural sector, widening the gap between local production and consumption. Despite being largely self-sufficient in producing vegetables, grapes, figs, olive oil, poultry, meat, eggs, and honey, the oPt remains food-insecure at the national level. It relies on imports for **40 percent of main food items** and over **95 percent of cereals and pulses** (MAS, 2017) 14. By 2022, the import dependency ratio rose to **32 percent** as agricultural production continued to decline (WFP, 2022)

[13] Cited in ARIJ, 2015

[14] FAO, European Union and CIRAD. 2023. Food Systems Profile - Palestine. Catalyzing the sustainable and inclusive transformation of food systems. Rome, Brussels and Montpellier, France. https://doi.org/10.4060/cc7323en,

15. Even with efforts to boost domestic food production, the oPt will need to heavily depend on imports to meet its food requirements.

Trends in Foreign Trade of Agrifood:

Table 6: Recent Trends in Agrifood Imports to The Occupied Palestinian Territory (In USD Million)

Rank	Commodity	2015	2020	Share in 2020	5-year compound annual growth rate
1	Animal feed	148	280	13 percent	89 percent
2	Live animals	81	195	9 percent	140 percent
3	Tobacco	134	191	9 percent	43 percent
4	Beverages	143	172	8 percent	20 percent
5	Flour/Cereals preparations	88	156	7 percent	77 percent
6	Dairy, eggs, honey	83	149	7 percent	80 percent
7	Fruit & nuts	103	140	6percent	35percent
8	Cereals	148	96	4percent	-35percent
9	Cocoa preps	48	94	4percent	95percent
10	Other	522	688	32percent	32percent
	Total	1, 500	2, 162	100percent	44percent

Source: Trade Data Monitor. 2023. In: Trade Data Monitor (2015–2020). Charleston, South Carolina. Cited 22 March 2023. www. tradedatamonitor.com

In contrast, agrifood exports declined by 14 percent over the 5-year period, with vegetables dropping the most, followed by tobacco (Table 3). Revenue from edible nuts and fruits, and the preparations of them almost doubled. Key exports are olives, olive oil and fruits, accounting for almost 40 percent of the export value. Most of these goods are destined for Israeli markets[16].

Table 7: Recent Trends of Agrifood Exports From The Occupied Palestinian Territory (In USD Millions)

Rank	Commodity	2015	2020	Share in 2020	5-year compound annual growth rate
1	Fruit & nuts	18	45	19 percent	152 percent
2	Oils	44	44	19 percent	1 percent
3	Edible preps	11	19	8 percent	81 percent
4	Beverages	9	18	8 percent	113 percent
5	Fruit and vegetable preparations	10	14	6 percent	43 percent
6	Cocoa preps	6	14	6 percent	114 percent
7	Spice, tea	15	13	5 percent	-16 percent
8	Vegetables 5percent - 82percent	69	12	5 percent	-82 percent
9	Tobacco	38	9	4 percent	-77 percent
10	Other	51	45	19 percent	-13 percent
	Total	270	232	100 percent	-14 percent

Source: Trade Data Monitor. 2023. In: Trade Data Monitor (2015–2020). Charleston, South Carolina. Cited 22 March 2023. www. tradedatamonitor.com

15 FAO, European Union and CIRAD. 2023. Food Systems Profile - Palestine. Catalyzing the sustainable and inclusive transformation of food systems. Rome, Brussels and Montpellier, France. https://doi.org/10.4060/cc7323en

16 FAO, European Union and CIRAD. 2023. Food Systems Profile - Palestine. Catalyzing the sustainable and inclusive transformation of food systems. Rome, Brussels and Montpellier, France. https://doi.org/10.4060/cc7323en

Consumption trends in the Occupied Palestinian Territory (oPt) reveal significant dietary shifts over time, influenced by globalization and socio-economic factors. Surveys like the SEFSec 2014 (FSS, 2016) highlight key patterns:

- Calorie-Intensive Diets: Most households rely heavily on carbohydrates (cereals, sugar, and fats) as primary sources of food energy.
- Low Fruit and Vegetable Intake: About 86 percent of the population consumes less than the recommended daily intake of fruits and vegetables, missing out on dietary fiber.
- Minimal Pulse Consumption: Pulses, though nutritious and affordable, are consumed less than twice per week, making them the least-consumed food group.
- Nutritional Barriers: Poverty and limited nutritional knowledge contribute to suboptimal dietary choices. Healthy foods like fruits, vegetables, and grains are unaffordable for many.
- Global Comparisons: According to the Global Burden of Disease Study 2017 (Afshin et al., 2019), fruit and vegetable consumption in the oPt is below global and Asian averages, while salt and sugar-sweetened beverage intakes far exceed recommended levels[17].

2. *Traditional farming methods vs. modern agricultural practices:* Agriculture in Palestine has historically relied on traditional farming methods, but there has been a gradual shift toward modern agricultural practices to improve productivity and sustainability. Below is a comparison between traditional and modern approaches:

Table 8: Traditional Method vs. Modern Practices in Agriculture Sector in WB

Aspect	Traditional Farming Methods	Modern Agricultural Practices
Labor	Manual labor, hand tools, and animal assistance	Mechanized farming with tractors and automated tools
Irrigation	Rain-fed agriculture and traditional water channels	Drip irrigation and automated watering systems
Seed Usage	Indigenous and locally adapted seeds	Hybrid and genetically improved seeds for higher yield
Fertilization	Organic manure and compost	Chemical fertilizers and biological soil enhancers
Pest Control	Natural methods, companion planting	Pesticides, biological control, and integrated pest management (IPM)
Farming Structures	Open fields with seasonal dependence	Greenhouses and controlled environments for year-round production
Harvesting	Manual harvesting using traditional tools	Mechanical harvesters and precision agricultural techniques
Market Access	Local markets and informal trade networks	Digital marketing, cooperative networks, and international exports
Technology Integration	Limited technological usage	Precision agriculture using drones, sensors, and AI-driven monitoring

The adoption of *modern agricultural techniques* ***can improve*** *food security, sustainability, and profitability* ***for Palestinian farmers, but many still*** *maintain traditional methods* ***due to*** *resource constraints, cultural preferences, and land access challenges****.***

Technology Use in Palestinian Agriculture:

[17] FAO, European Union and CIRAD. 2023. Food Systems Profile - Palestine. Catalyzing the sustainable and inclusive transformation of food systems. Rome, Brussels and Montpellier, France. https://doi.org/10.4060/cc7323en

- The adoption of agricultural technology in Palestine is growing, with efforts to enhance productivity, sustainability, and market access. However, challenges such as high costs, limited infrastructure, and restricted access to advanced tools have slowed widespread adoption.
- Greenhouse farming is increasingly used to protect crops from climate fluctuations and improve yields.
- The Internet of Things (IoT) is being explored for smart greenhouse management, but adoption remains limited due to cost barriers and lack of farmer training. The Palestinian Aggrotech Summit, supported by UNDP and the Government of Japan, promotes digital solutions in agriculture to encourage youth entrepreneurship and innovation. ICT tools are being introduced to optimize farming operations and improve access to global markets.

***Studies show that** agricultural extension programs **have increased the use of** improved crop varieties, fertilizers, pesticides, and biological control methods**.*

3.0 Seasonal Variations and Regional Agricultural Differences in the West Bank: Agricultural production in the West Bank is influenced by seasonal variations and regional differences, affecting crop yields, farming techniques, and market supply.

Table 9: Seasonal Variation and Regional Agriculture in West Bank

Category	Winter (Nov–Feb)	Spring (Mar–May)	Summer (Jun–Aug)	Autumn (Sep–Oct)
Major Crops	Wheat, barley, spinach, lentils	Almonds, figs, early vegetables	Tomatoes, cucumbers, eggplants, citrus fruits	Olive harvesting, grapes, late-season fruits
Rainfall & Irrigation	High rainfall, minimal irrigation	Moderate rainfall, expanding irrigation	Low rainfall, heavy reliance on irrigation	Limited rainfall, irrigation for olives & vines
Market Supply	Local grain & legume sales	Early fruit markets & herbs	Peak vegetable production & exports	Olive oil processing & fruit preservation
Regional Specialization	Northern West Bank wheat & barley farms	Central vineyards & almond groves	Jordan Valley citrus & greenhouse vegetables	Southern grape farms & olive harvesting

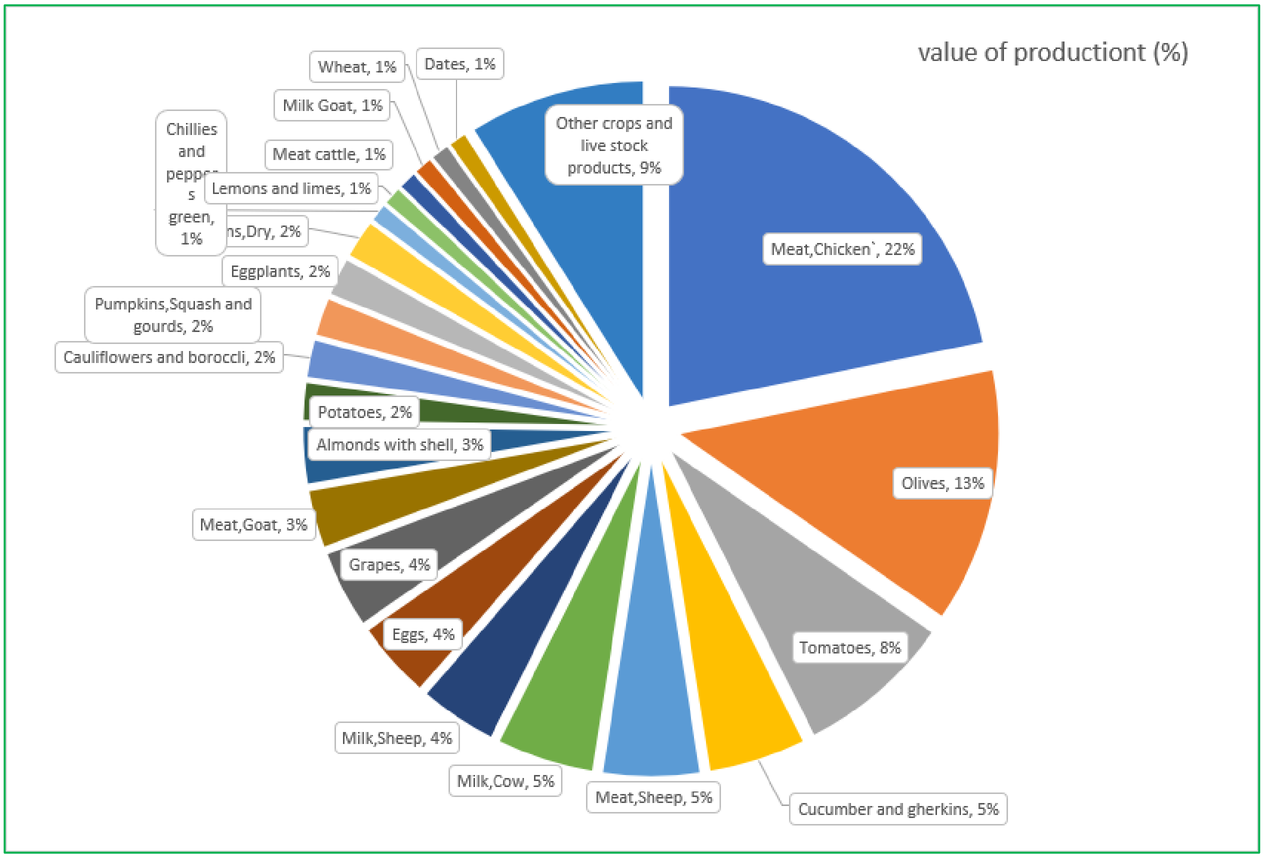
- Irrigation Efficiency: In the Jordan Valley, 97% of vegetables are irrigated using drip systems, with an application efficiency of 78%.
- Cultivated Land: The total cultivated area in the West Bank varies by region, with Jenin ranking highest at 281,000 dunums, while Jerusalem ranks lowest at 10,300 dunums.
- Crop Distribution: The West Bank produces a wide range of crops year-round, supported by greenhouse farming and seasonal climate variations[18].

4.0 The Agriculture Production Structure in the oPt: According to FAO (2021), the agriculture sector in the occupied Palestinian territories (oPt) derives nearly half its from livestock products, with the following breakdown: Nearly half the value comes from livestock products – meat from chickens (22 percent), sheep (5 percent), goats (3 percent) and cattle (1 percent); milk from cows (4 percent), sheep (4 percent) and goats (1 percent); and eggs (4 percent). Olives (13 percent), tomatoes (8 percent), cucumbers and gherkins (5 percent), grapes (4 percent) and almonds (3 percent) account for notable shares, along with other fruits and vegetables[19.]

[18] Applied Research Institute - Jerusalem (ARIJ) report on irrigation efficiency

[19] The Palestinian Central Bureau of Statistics (PCBS) and Palestine Monetary Authority (PMA). The Performance of the Palestinian Economy for 2024, and Economic Forecasts for 2025 https://www.pcbs.gov.ps/site/512/default.aspx?lang=en&ItemID=5905

Figure 1: Value of Production



Source: FAO, 2021, FAOSTAT Production Database. In: FAO, Cited 20 March 2023. www.fao.org/faostat/en/#data

Market Structure and Trade:

1. *Local, Regional, and International Markets:* Palestinian agricultural goods are distributed across local, regional, and international markets, with key products including olive oil, fresh herbs, citrus fruits, and specialty grains. (i) ***Local Markets:*** Palestinian farmers supply municipal markets, cooperatives, and direct-to-consumer sales, ensuring food security and economic stability. (ii) **Regional Trade:** Palestinian agricultural exports reach neighboring Middle Eastern markets, particularly Jordan and Gulf countries**,** where demand for olive oil and fresh produce is strong. (iii) **International Exports:** Palestinian agribusinesses export olive oil, dates, and herbs **to** Europe and North America, though trade restrictions and logistical challenges impact market expansion.
2. *Supply Chain Dynamics:* The Palestinian agricultural supply chain involves multiple stages, including production, processing, distribution, and retail: (i) *Production:* Farmers cultivate crops and livestock, often relying on cooperative networks for resource sharing. (ii) Processing: Agrifood industries refine raw products into olive oil, dairy goods, pickled vegetables, and dried herbs. (iii) Distribution: Agricultural goods move through wholesale markets, cooperatives, and export channels, though border restrictions affect trade flow. (iv) Retail: Palestinian agricultural products are sold in local markets, supermarkets, and international specialty stores, with branding efforts improving market visibility. Agricultural holdings in Palestine **total** 131,600**, with** 95.1% managed by household heads**.** Cultivated land distribution: **Jenin leads with** 281,000 dunums**, while Jerusalem has the lowest at** 10,300 dunums**.** Agricultural education gap: 93.7% of farmers lack formal agricultural training**, impacting productivity.**
3. *Key Trading Partners & Export/Import Dependencies:* Palestine's agricultural trade is shaped by regional partnerships and import dependencies: (i) Exports: Key export destinations include Jordan, Gulf countries, Europe, and North America, with olive oil, dates, and herbs leading sales. (ii) Imports: Palestine imports fertilizers, seeds, irrigation equipment, and processed food products, primarily from Israel and neighboring countries. (ii) Trade Challenges: Border restrictions, limited infrastructure, and high transportation costs impact Palestinian agricultural exports, requiring policy interventions and cooperative-led trade initiatives[20].

C- Land and Resource Management:

1. *Demographics of Agricultural Holders in oPt.* Total agricultural land in Palestine covers approximately 50,820 hectares, with Jenin ranking highest at 281,000 dunums and Jerusalem lowest at 10,300 dunums. According to PCBS (2022), Palestine had 138,339 agricultural holders distributed as follows: 114,048 holders (82.4 percent) in the WB (PCBS, 2022). Gender Distribution: (i) About 92 percent (127,332) of male holders. (ii) About 7.7 percent (10,653) are female holders. (iii)About 0.3 percent (354) are non-household holders. The agricultural sector in the occupied Palestinian territories (oPt) is structured around key areas of crop cultivation and livestock management, reflecting both economic significance and evolving land use trends. 1. Olive Tree Cultivation: Represents 57% of total cultivated land in the oPt. It covers 85% of horticultural cultivated areas, making olives a dominant agricultural product.

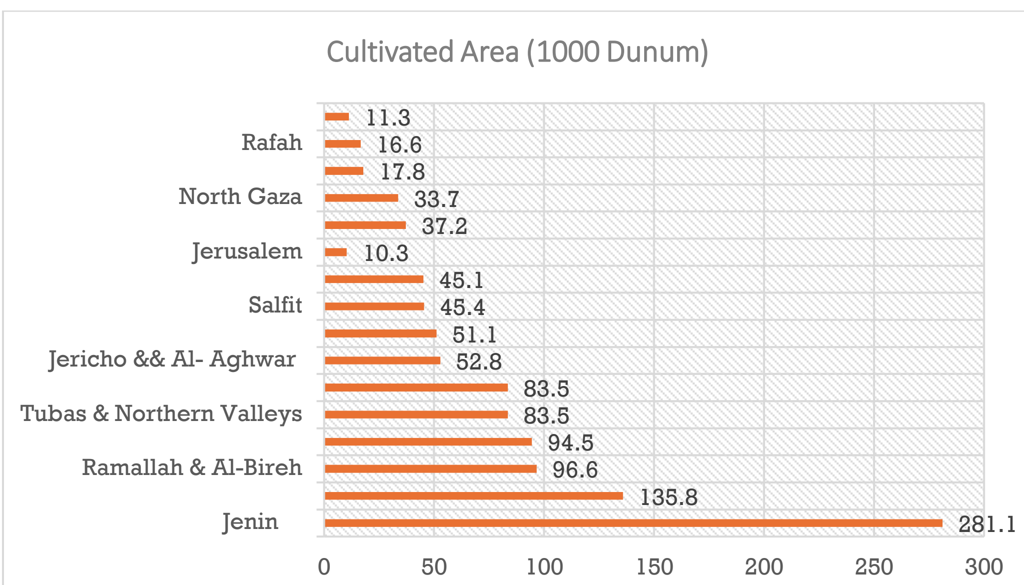
[20] ARIJ, Palestinian Agricultural Production and Marketing between Reality and Challenges, 2015

2. Other Crop Cultivation: Field Crops account for 19.8% of cultivated land. Vegetables cover 18.5% of cultivated land. Other Fruit Trees make up 9.3% of cultivated land, contributing to diversified agricultural production.

3. Livestock Sector: Accounts for 45% of total agricultural value (FAO, 2021). Rural households rely on livestock as a secondary income source. Women play a significant role in livestock management and associated activities (FAO, 2013), highlighting their economic contributions to agriculture. Rain fed farming is common, but irrigated agriculture is expanding in regions like the Jordan Valley, where 97% of vegetables rely on irrigation.

   Household Heads: Out of 131,600 agricultural holders in Palestine, 95.1 percent are heads of households, while only 6.2 percent (8,660 holders) are members of cooperative societies or agricultural unions. This indicates a low level of formal agriculture organization, which could impact access to resources, market opportunities, and collective bargaining power. Agricultural Education and Training: a significant 93.7 percent (129,698 holders) have not received agricultural education or training, while 26.4 percent (36,537 holders) have completed preparatory-level education. this highlights the need for capacity-building programs, technical training and agricultural extension services to enhance their productivity and sustainability. Cultivated Areas: Jenin has the largest cultivated land with ranks 281,000 dunums, while Jerusalem ranks lowest with 10,300 dunums in the West Bank. This distribution reflects **regional agricultural strengths**, with Jenin playing a key role in **crop production and agribusiness activities**

Figure 2: Cultivated Area of Field Crops by Governorate



Source: PCBS & MoA: Agriculture Census, 2021- Results - Palestine

Table 10: Total Area Per Category:

The table presents an overview of key agricultural statistics across different categories:

Category	Key Figures/Statistics
Field Crops	- Total Area: 217,206 dunums (91.2 percent in West Bank, 8.8 percent in Gaza Strip)
	- Top Governorate: Jenin (77,183 dunums, 35.5 percent)
	- Lowest Governorate: Salfit (499 dunums, 0.2 percent)

Vegetables	- Total Area: 202,285 dunums (69.6 percent in West Bank, 30.4 percent in Gaza Strip)
	- Top Governorate: Jenin (45,393 dunums, 22.4 percent)
	- Lowest Governorate: Jerusalem (356 dunums, 0.2 percent)
	- Top Crop: Potatoes (23,543 dunums, 11.6 percent), followed by Cucumbers (21,516 dunums, 10.6 percent)
Cattle	- Total: 67,760 heads (78.5 percent in West Bank, 21.5 percent in Gaza Strip)
	- Top Governorate: Hebron (30.3 percent)
	- **Lowest Governorate**: Jerusalem (0.4 percent)
Sheep	- Total: 771,168 heads (92.5 percent in West Bank, 7.5 percent in Gaza Strip)
	- Raising Systems: 41.8 percent intensive, 58.2 percent semi-intensive
	- Top Governorate: Hebron (26.0 percent)
	- Lowest Governorate: Rafah (0.9 percent)
Goats	- Total: 239,966 heads (96.4 percent in West Bank, 3.6 percent in Gaza Strip)
	- Top Governorate: Hebron (21.0 percent)
	- Lowest Governorate: Rafah (0.3 percent)
Poultry	- Broilers: 71,019 thousand birds
	- Domestic Poultry: 377 thousand birds
Beehives	- Total: 64,360 beehives (74 percent in West Bank)
	- Type Distribution: 87 percent modern, 13 percent traditional

Table 11: Total Area per crop in North of WB

The table summarizing the information provided about crops in the WBGs and other findings:

Category	Key Insights
Top Crops (Greenhouses)	- Cucumber (35 percent)
	- Tomato (34.88 percent)
	- Bell Pepper (9.75 percent)
Crops Introduced in Greenhouses	- Strawberries (0.92 percent)
	- Medicinal Herbs (0.13 percent)
	- Others: Eggplant (1.84 percent), Potato (0.46 percent), Cauliflower (0.33 percent), Spinach (0.72 percent), Rocca (0.26 percent)
Diversified Vegetables	Spinach, Eggplant, Rocca, Cabbage, Cauliflower, Potato, Borago, Kidney Beans, Thymes, Medicinal Herbs
Impact of Education & Experience	- Farmer education levels and years of experience enhance skills for crop diversification and adaptation to markets.
Stable Agricultural Patterns	- Consistent preference for cucumbers, tomatoes, and peppers based on market demand, food manufacturing, and export.
Traditional Rain-Fed Crops	Wheat, Onions, Garlic, Almonds, Apples, Grapes.
Irrigated Crops	Tomatoes, Cucumbers, Eggplants, Squash, Spinach, Citrus, Guava.
Exposed vs. Protected Agriculture	- 68 percent of female farmers engage in exposed agriculture.
	- 32 percent of female farmers use protected agriculture (greenhouses).
Women's Role in Crop Production	- Land preparation, planting, harvesting, grading, and value addition.
	- Particularly significant in growing secondary crops like legumes and vegetables in home gardens.
Crop Mix in West Bank	- Olive Trees: 57 percent of cultivated land.
	- Field Crops: 24 percent.
	- Vegetables: 10 percent.
	- Other Fruits: 9 percent.

3. *Access to Water, Fertilizers, Technology & Irrigation:* Water scarcity remains a major challenge, with Palestinian farmers receiving less than 30% of their required water supply due to restrictions. Drip irrigation systems are increasingly used, improving water efficiency by 78% in irrigated farms. Fertilizer use is limited due to high costs, with organic compost and manure serving as alternatives. Technology adoption is growing, with greenhouse farming, IoT-based monitoring, and precision agriculture being introduced. *3. Environmental Sustainability & Climate Adaptation:* Climate change threatens Palestinian agriculture, with rising temperatures and unpredictable rainfall affecting crop yields. Sustainable farming initiatives focus on soil conservation, organic farming, and water-efficient irrigation. Agroforestry projects are being implemented to reduce desertification and improve biodiversity**.**

The following table summarizing the challenges and recommendations for empowering women in the Palestinian agricultural sector, based on the provided text:

Table 12 : Infrastructure Challenges in Agriculture Sector

Category	Details
Infrastructure Challenges	- Water scarcity: Annual use of 150 million cubic meters, with prices ranging from NIS 1.9 to 15 per cubic meter.
	- Rugged rural roads: Increased costs for land reclamation, ploughing, and water transportation.
	- Lack of refrigeration: High rates of spoilage due to absence of refrigerated storage facilities.
	- Market imbalance: No database for supply and demand, leading to surpluses and deficits of certain products.
Cultural Barriers	- Restricted mobility: Women face cultural norms limiting their movement and ability to sell products at markets.
	- Double burden: Women juggle agricultural and domestic tasks, increasing their workload.
Trade Challenges	- Small-scale sales: Women sell locally or through cooperatives but face pricing pressures and unreliable purchasing by traders[21].
	- Low export levels: Only 2 percent of farmers export products due to financial and infrastructural limitations.
Cooperatives	- Improve women's bargaining power, cost-sharing, and access to resources.
	- Barriers to financing, technology, and participation due to cultural norms.
Gender Roles in Agriculture	- **Women**: Land preparation, planting, harvesting, livestock care, and reproductive duties.
	- **Men**: Pesticide spraying, market sales, and income-focused agricultural work.

D- Role of Women in Agriculture

Women play a significant role in Palestine's agricultural sector, contributing to crop production, food processing, and trade. However, they face structural barriers such as limited land ownership, financial constraints, and restricted market access.

1.0 Women's participation in crop production: (i) Women make up approximately 15.4% of the total agricultural workforce in the West Bank (ii) Despite their contributions, only 6.2% of agricultural holders are members of cooperative societies or agricultural unions. (iii) Women

[21] Based on FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en,2022

are actively involved in olive farming, vegetable cultivation, and herb production, yet land ownership remains male-dominated.

2.0 *Women's participation in workforce*: In 2023, women employed in agricultural activities represented 17.1 percent of the workforce in the West Bank[22]. Rural women have a higher share as contributing family workers and own-account workers compared to urban women, indicating greater employment vulnerability in rural areas. A significant portion of contributing family workers and own-account workers alternate between agriculture and service occupations within agricultural value chains. The disparity between rural and urban women in self-employment reflects limited access to formal employment opportunities in rural areas, often pushing women into self-employment roles.

Table 13: Labor Type: Male Representation and Female Representation.

Labor Type	Male Representation	Female Representation
Employers	6.6 percent	0.2 percent
Self-Employed	30.9 percent	12.5 percent
Wage Employees	50.0 percent	18.3 percent
Unpaid Family Labor	12.5 percent	71.0 percent
Casual Labor (<14 hours/week)	31.6 percent	48.4 percent

- Women's employment in agriculture is predominantly unpaid family labor (71 percent), in stark contrast to men's 12.5 percent.
- Casual labor among women (48.4 percent) is significantly higher than men's (31.6 percent), highlighting unstable work hours and conditions.
- Gender gaps in remuneration and opportunities point to systemic inequality in the sector.

Table 14: Distribution of Employed Individuals Aged 15 Years and Above in Agriculture, Hunting & Fishing Activity in Palestine by Region, Employment Status and Sex, 2021

Region	Employment Status and Sex									
	Employer		Self Employed		Wage Employees		Unpaid Family Members		Total	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Palestine	6.6	0.2	30.9	12.5	50.0	18.3	12.5	71.0	100	100
West Bank	7.1	0.2	35.5	10.9	42.0	16.2	15.4	72.7	100	100
North of West Bank	5.3	0.2	40.4	9.3	35.5	8.7	18.8	81.8	100	100
Middle of West Bank	10.3	0.6	19.0	8.3	66.3	51.8	4.4	39.3	100	100
South of West Bank	8.7	-	38.9	17.1	35.4	-	17.0	82.9	100	100

Source: PCBS, 2022, https: labor Force Survey Database, 2021. //www.pcbs.gov.ps/Portals/_Rainbow/Documents/Agr-labour-2021-E-12.htm

Table 15: Labor Type in the West Bank Norther Governorate

Type	Male Representation	Female Representation	Female Representation (All of Palestine)
Employers	5.3 percent	0.2 percent	-

[22] **Palestinian Central Bureau of Statistics, 2024**. Data base of Labor Force Survey, 2015-2023. Ramallah-Palestine

Self-Employed	40.4 percent	9.3 percent	12.5 percent
Wage Employees	35.5 percent	8.7 percent	18.3 percent
Unpaid Family Labor	18.0 percent	81.8 percent	71.0 percent

As the data shows, there are wider gender gaps in the Northern Governorates in the categories of self- employment, wage employees, and unpaid labor as family members[23].

3.0 *Women's Role in food Processing:* Women lead traditional food processing industries, including olive oil production, dairy processing, and pickling. Herb drying and spice blending are key sectors where women-run cooperatives export products like Za'atar and chamomile. Makdous (stuffed eggplants) and Maftoul (Palestinian couscous) are widely produced by women-led agribusinesses. *(3) Women's role in agricultural trade:* Women participate in local markets, selling fresh produce, processed foods, and handmade agricultural goods. Regional trade networks allow women-led cooperatives to export olive oil, dried herbs, and specialty foods to Jordan and Gulf countries. Financial barriers and trade restrictions limit women's ability to expand their businesses internationally[24].

Gender Inequalities in the Context of the Food Products Sector:

The Palestinian food sector is one of the most rapidly developing sectors in the WB and GS accounts for 20 percent of total local production, has a total market size of $600 million, and a labor force of around 15,000 workers. The strength of the sector's basic products and the recent development in production quality to meet international standards and requirements are enhancing the sector in the local market and increasing the export capability of local producers. Leading local subsectors include dairy products, beverages, meat processing, bakeries, and olive oil production[25]. Basic needs include food processing equipment, packaging equipment, refrigeration, and agricultural machinery.

Most analysis of the food products sector in the context of industry is based on primary data collected through the (UNCTAD, 2023) field study. Enterprises active in the food products sector in the State of Palestine make up 19.6 per cent of all enterprises operating in the industrial sector (PCBS, 2020b). The sector includes food manufacturing and processing at all industrial scales. As explained by UNCTAD's survey respondents, women's presence as producers/traders in this sector is largely limited to micro- and small-scale businesses and vendors, whether as owners or workers. The larger enterprises in the sector, including large factories and production facilities, are mostly owned or managed by men. Women-led businesses featured in UNCTAD's field study are thus concentrated in local markets as cooperatives or as small-scale food production, preparation, or catering businesses. Women-led or women-dominated businesses, therefore, operate both formally and informally. Women-led informal businesses in this sector tend to be micro or small-scale businesses in local areas. Women cooperatives, on the other hand, operate formally given their extended reach in local markets as well as to foreign markets through contractual agreements with marketing companies. The varieties of products made by these businesses include homemade cooking/food preparation of such products as jams, sauces, and pickled products (including olives), among others[26].

Role of Women in the Food Products Sector: The food products sector is a practical and accessible alternative for many Palestinian women, particularly those restricted by social norms or political conditions.

[23] I bid

[24] FAO: Country Gender Assessment of the agriculture and rural sector - Palestine

[25] https://www.trade.gov/market-intelligence/west-bank-and-gaza-food-sector

[26] The United Nations Conference on Trade and Development (2023) Trade and Development in the State of Palestine Through a Gender Lens, Geneva

Working from home allows them to lead businesses while managing caregiving responsibilities, saving costs on childcare and other expenses. Women's strengths in food preparation, shaped by social norms, provide them a comparative advantage in terms of quality and innovation. Men's roles in this sector are typically limited to physically demanding tasks like transportation, marketing, and logistical support.

Challenges in the Food Products Sector[27]: *Informal Nature of Businesses:* Many women-led businesses operate informally, restricting their ability to issue invoices or meet the documentation requirements of larger clients or institutions. Informality also inhibits access to resources and interventions, leaving businesses isolated from potential support. *Deficiencies in Marketing and Business Operations*: Women-led businesses often lack critical marketing tools such as branding, standardized packaging, barcodes, and serial numbers. Cash flow limitations prevent them from managing export processes, including upfront costs and payment delays of up to 6 months. *Gendered Barriers in Market Access:* Women face limited mobility, reducing their ability to engage with markets, sellers, and exporters, unlike their male counterparts who have more freedom and networking opportunities. Male dominance in economic and social institutions reinforces cultural prejudices, further marginalizing women. *Skills Gaps and Ineffective Training Programs*: Women lack essential business skills, such as feasibility analysis, financial management, and advanced marketing techniques, which are often reserved for men in the community. Existing skill development programs are often inaccessible due to women's household responsibilities, male guardians' disapproval, and societal pressures. Burden of Domestic Responsibilities: Unequal division of domestic chores limits women's ability to focus on their businesses or participate in decision-making processes within the family or business context. *Cooperative Membership Challenges*: While cooperatives help some women overcome barriers, others are excluded due to lack of invitations, inability to meet production schedules, or lack of capacity to adhere to quotas.

Potential Solutions and Interventions

Formalizing Women-Led Businesses: Create pathways for informal businesses to formalize their operations, enabling them to access financial and technical resources, and establish support mechanisms for professional branding, packaging, and marketing to boost competitiveness.

Capacity-Building Programs:

- Design gender-sensitive and accessible training programs focused on financial management, marketing, and production skills.
- Address barriers such as household responsibilities by providing childcare during training sessions or scheduling sessions flexibly.
- Promoting Cooperative Engagement:
- Expand the reach of cooperatives to include marginalized women, offering flexible membership terms and quotas to accommodate diverse participants.
- Foster partnerships between cooperatives and institutional buyers, helping women scale their businesses.

Improving Market Access:

- Invest in marketing infrastructure, including trade exhibitions, online platforms, and targeted marketing campaigns.
- Address mobility challenges by enhancing transportation options for women.

Challenging Cultural Norms:

- Launch public awareness campaigns to reduce cultural prejudices and promote women's independence in economic activities.

[27] The United Nations Conference on Trade and Development (2023) Trade and Development in the State of Palestine Through a Gender Lens, Geneva

- Engage religious and community leaders to shift societal perceptions about women's roles in business.

Enhanced Policy Implementation: Strengthen government strategies promoting women's economic participation, ensuring their implementation translates to measurable impacts on the ground.

4.0 Challenges related to land ownership, financial access, and decision making

4.1 Challenges in Land Ownership & Inheritance Rights for Women in the West Bank: Land Ownership Challenges- Women in the WB report higher access levels to commercial land and other property types. However, land ownership among women remains low, and those who do own land often struggle to control and benefit from it. Several common barriers include Shared lands where ownership disputed, family homes inherited from parents but occupied by male siblings[28]. Legal & societal restrictions preventing women from exercising full ownership rights. Inheritance Rights: When asked about inheritance rights, women's estimate on their communities' inheritance practices varied: [29] **40 percent** believed that women obtain their inheritance rights, **50 percent** reported that the rate is **30 percent or less**, **40 percent** indicated that the rate is **50 percent or more**, and only **19 percent** estimated that the rate is **70 percent or more**.

Data from the Palestinian Working Woman Society for Development (PWWSD) highlights the challenges women face in accessing land and agricultural resources in the Occupied Palestinian Territory (oPt): (i) Curtilage Land Access- 31.8 percent of women report access, and 68.2 percent are unable to access it. (ii) Agriculture Land- 39.7 percent of women report access, while 60.3 percent lack access. 60.3 percent are unable to access it. (iii) Livestock & Poultry- 56.1 percent of women report access to family-owned sources, while 43.9 percent do not. (iv) Non-Mechanized Farm Equipment: 45 percent of women report access, whereas 55 percent lack access. (v) Mechanized Farm Equipment: Only 10.3 percent of women report access, while 89.7 percent remain unable to access it.

Ownership of Farming Equipment:
(i) Non-Mechanized Equipment: 4.3 percent of households own non-mechanized equipment (e.g., animal-drawn ploughs, hay rakes, carts, sickles). Ownership Distribution: 15.8 percent by female respondents, 84.2 percent by husbands, and 70 percent owned solely by male family members (mostly husbands). (ii) Mechanized Equipment: 5.9 percent of households own mechanized equipment (e.g., tractors, trucks, irrigation systems), with an average value of 38,757 NIS. Ownership Distribution: 6.9 percent by female respondents, 82.2 percent by husbands, and only 3.4 percent of women reported sole ownership, with another 3.4 percent reporting joint ownership with husbands[30]

Technology Use among Women Farmers:

Women farmers in the West Bank are increasingly integrating **modern agricultural technologies** to improve productivity and sustainability. Notable rates of technology adoption

[28] The Palestinian Working Woman Society for Development (PWWSD), 2020, In-depth Assessment of Women's Access to and Ownership of Land and Productive Resources in the occupied Palestinian territory. https://pwwsd.org/uploads/15949011091533037615.pdf
[29] The Palestinian Working Woman Society for Development (PWWSD), 2020, In-depth Assessment of Women's Access to and Ownership of Land and Productive Resources in the occupied Palestinian territory. https://pwwsd.org/uploads/15949011091533037615.pdf
[30] The Palestinian Working Woman Society for Development (PWWSD), 2020, In-depth Assessment of Women's Access to and Ownership of Land and Productive Resources in the occupied Palestinian territory. https://pwwsd.org/uploads/15949011091533037615.pdf

among women include: (i) Smart Irrigation Systems – Many women-led farms use drip irrigation and water-saving techniques to combat water scarcity. (ii) Greenhouse Farming – Adoption of protected cultivation methods allows women to grow crops in controlled environments, increasing yield and reducing climate-related risks. (iii) Agro-Food Processing Equipment – Women in cooperatives utilize semi-automated food processing tools to enhance product quality and market competitiveness. (iv) Organic Farming & Bio pesticides – Some women farmers prioritize eco-friendly technologies, including biodegradable fertilizers and natural pest control methods. (v) Digital Market Platforms – Women-led agricultural enterprises are increasingly leveraging social media and e-commerce platforms to sell their products and reach broader markets.

Among women farmers, notable rates of technology use include [31]:

- 71 percent using tractors and manual spraying machines.
- 79 percent using ploughs.
- 32 percent using mechanical spraying machines.
- 34 percent using transport vehicles.

However, qualitative findings suggest low adoption rates of tractors due to rugged terrain, randomly distributed trees, and the high cost of purchasing or renting equipment. Farmers who own tractors often deal with older models, requiring significant maintenance expenses of **NIS 1,500–2,000** per month.

Challenges in Technology Adoption:

Despite progress, barriers remain, such as: (i) **Limited financial resources** preventing investment in advanced tools. (ii) **Lack of access to training programs** for technical skills in modern agriculture. (iii) **Cultural constraints** affecting women's involvement in tech-driven farming methods.

To support women farmers, policy interventions, financial inclusion, and capacity-building programs are crucial. Increasing access to agricultural funding, digital literacy programs, and technical assistance will help expand technology adoption, leading to greater economic empowerment and sustainability.

The impact of land scarcity on women[32]: (i) Limited agricultural land leads to intense competition among farmers, reducing women's opportunities to claim their share, as power dynamics often favor men. (ii) Many women relinquish their family inheritance under societal pressures from patriarchal norms or because small household holdings are insufficient to meet family needs. (iii) Land ownership has shrunk significantly due to Israeli colonial practices, such as confiscation for settlements or the separation wall. (iv) Women's agricultural holdings are typically smaller than men's, limiting their economic returns and access to resources, support, and services. Breakdown of agricultural holdings by type: 73.4 percent are crop holdings, 14.2 percent are animal holdings, and 12.4 percent are mixed agricultural holdings.

Benefits of Women's Land Ownership: (i) Family Welfare: Women prioritize family needs, leading to reduced poverty and improved nutrition, education, and health outcomes for children if granted economic independence over land resources. (ii) Efficiency: Ownership enables women to make timely decisions, reinvest profits, and eliminate lease expenses, boosting productivity. (iii) Empowerment: Land ownership fosters equality, strengthens women's symbolic and economic power, and enhances participation in political and social domains. (iv) Cultural Norms: Most male farmers consider agricultural land ownership and profit control as male roles, while women's responsibilities are confined to family caretaking and crop

[31] FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en,2022

[32] Nida Abu Awwad, 2016, Gender and Settler Colonialism in Palestinian Agriculture: Structural Transformations. Journal: Arab Studies Quarterly

cultivation and harvesting. This gender-based division of roles perpetuates traditional attitudes that hinder women's empowerment. (v) Institutional Failures: Interventions by governmental and non-governmental institutions have done little to challenge prevailing perceptions of women's roles in agriculture. Instead, these efforts have often reinforced dominant male-oriented attitudes, preventing women from exercising meaningful control over land and agricultural income.

4.2 *Financial access and barriers:* women in Palestinian agriculture face numerous barriers to securing financial resources, which affect their ability to expand businesses, invest in technology, and access markets. The main reasons for this financial limitation include: ***(i) Lack** of Collateral & Land Ownership***: Only 5% of women own agricultural land**,** making it difficult to use land as collateral for loans. Without land ownership**,** women struggle to access formal banking services and credit programs**. *(ii)*** *Restrictive Banking Policies*: High-interest rates on agricultural loans prevent women from securing funding. Many financial institutions require male guarantors for women applying for credit. *(iii) Limited Cooperative Membership & Financial Literacy*. Only 6.2% of women agricultural holders are members of cooperative societies, limiting access to group financial benefits. Lack of financial training and business development programs restricts women's ability to apply for loans or manage funds efficiently. (iv) Societal Barriers & Economic Disparities. Women face social norms that limit their role in financial decision-making. Family dynamics and cultural restrictions prevent women from independently controlling agricultural investment.

4.3 *Decision-Making Regarding Land and Other Agricultural Resources:* The PWWSD research provides critical insights into the dynamics of decision-making regarding land and agricultural resources in Palestine. The findings highlight reveals a significant disparity in decision-making power between male and female family members, illustrating the dominance of men in making key agricultural decisions. The key findings: (i) Men hold primary control over decisions related to land ownership, usage, and agricultural resource allocation. (ii) While women contribute to decision-making, their influence remains substantially lower than that of men. (iii) Structural barriers, including legal, social, and economic constraints, reinforce male dominance in agricultural governance[33]. This disparity limits women's ability to exercise autonomy, access productive resources, and fully participate in agricultural development.

- Curtilage Land: Women contribute 24.7 percent to decision-making (primarily wives at 21.5 percent, with mothers at 1.3 percent and sisters at 1.7 percent). Men dominate this area, contributing 95.2 percent, with husbands accounting for 77.2 percent, fathers for 14 percent, and brothers for 4 percent.
- Agricultural Land: Women contribute 45.5 percent (wives at 34.4 percent, mothers at 4.1 percent, and sisters at 6 percent). Men's contribution is 91.3 percent, including husbands (68.8 percent), fathers (15.6 percent), and brothers (6.9 percent).
- Livestock and Poultry: Decision-making power for women is 62.1 percent, with wives contributing 59.1 percent and mother's 3 percent. Men's contribution is

33 **Source:** The Palestinian Working Woman Society for Development (PWWSD), 2020, In-depth Assessment of Women's Access to and Ownership of Land and Productive Resources in the occupied Palestinian territory. https://pwwsd.org/uploads/15949011091533037615.pdf

similar at 69.7 percent, dominated by husbands (68.2 percent) and fathers (1.5 percent).

- o Non-Mechanized Equipment: Women contribute 31.6 percent, while men lead with 89.5 percent (husbands at 73.7 percent and fathers at 15.8 percent).
- o Mechanized Equipment: Women contribute only 10.3 percent, compared to men's overwhelming 103.4 percent, including husbands (79.3 percent), fathers (10.3 percent), and brothers (13.8 percent).

4.4 Gender Preferences in Agricultural Extension: Studies, including FAO's Country Gender Assessment (CGA), have examined gender -based in agricultural extension services, particularly in communities operating under patriarchal norms:

- Many women farmers prefer female extension agents due to cultural considerations and comfort levels.
- Working with male agents is often perceived as inappropriate in rural communities and may lead to reputational concerns.
- Women feel more at ease with female extension workers, allowing for better communication and knowledge exchange.
- The presence of female extension workers enhances the quality of training sessions, leading to improved learning outcomes.

Barriers for Female Farmers: (i) Insufficient Female Extension Officers: There are too few female extension agents, which hampers outreach to women farmers, especially since cultural traditions restrict male agents from working closely with women. **(ii)** Educational and Demographic Influences: Farmers with higher education levels, such as diplomas or degrees, are more likely to utilize extension services. Similarly, full-time and commercial farmers, as well as those with irrigated farmland, show greater interest in adopting new technologies through extension programs. **(iii)** Crop-Specific Adoption: Vegetable, field crop, and mixed livestock farmers are more likely to engage with extension services than fruit and olive producers. Fruit and olive cultivation, being tied to permanent crops, shows slower yield improvements from new technologies, making these farmers less inclined to adopt them.

Table 16: Number of Extension Units, Agricultural Stations and Agricultural Extension Agents in Palestine by Region, 2021

Region	Number of Extension *Units	Number of Agricultural Stations*	Number of Agricultural Extension Agents
Palestine	46	11	**162**
West Bank	43	5	**142**
North of West Bank	12	3	**57**
Middle of West Bank	5	1	**27**
South of West Bank	26	1	**58**
Gaza Strip	3	6	**20**

Agricultural extension courses are vital for equipping women farmers with new skills and information. They improve the quality of both crop and animal production while enhancing supply chain efficiency. However, the provision of extension services by the Ministry of Agriculture remains limited and requires expansion to meet geographical and individual-specific needs. Women have identified a lack of clarity on how to access training opportunities provided by cooperatives and organizations. Furthermore, these cooperatives often struggle to effectively utilize media and social platforms to promote their services, limiting their outreach and impact.

To enhance women's access to extension services and overcome these barriers[34]:

- Expand Outreach: Develop targeted campaigns via media and social platforms to inform women of available training programs.
- Gender-Sensitive Approaches: Recruit more female extension agents and redesign training models to accommodate women's unique needs and constraints.
- Capacity Building: Provide training opportunities that address literacy gaps and adaptation challenges.
- Accessible Locations: Conduct trainings in spaces where women can participate comfortably and without cultural limitations.

4.5 Gender Wages in the Agriculture Sector. The gender wage gap in Palestine remains a significant issue, particularly in the agricultural sector. According to PCBS (2019b) data: The average daily wage for men in agriculture is 82.8 NIS, whereas women earn only 66.9 NIS—approximately 81 percent of men's wages. These disparities extended across various economic sectors, highlighting system wage inequalities. Women engaged in all economic activities earn an average daily wage of 92.3 NIS (USD 25), whereas men earn 128.6 NIS (USD 35.50). Despite earning significant less, women often work longer hours. On average, working women in the WB dedicate 36.6 hours per week to economic activities, Men, by contrast, work 44 hours per week. This persistent wage gap underscores the urgent need for gender-equitable reforms, including: (i) equal pay for equal work policies, ensuring wage parity cross sectors. (ii) systemic interventions to combat structural gender biases affecting employment conditions, enhanced labor protection to improve working conditions for women.

Table 17: Average of Weekly Work Hours, Monthly Workdays and Daily Wage For Wage Employees (15 Years And Above) In Palestine By Sex and Economic Activity, 2018 (Source: PCBS, 2019b)

Economic Activity	Medium Daily Wages (NIS)			Average Daily Wages			Average Monthly Days			Average Weekly Hours		
	Males	Females	Both	Males	Females	Both	Males	Females	Both	Males	Females	Both
Agriculture, Hunting, Fishing	70.0	60.0	70.0	82.8	66.9	82.2	18.3	21.5	18.4	41.6[35]	36.4[36]	35.1
Average for all economic sectors	100.	92.3	100.	128.6	92.5	123.0	22.0	23.0	22.1	42.8	35.1	41.6

Source: FAO, 2021, Country Gender Assessment of the agriculture and rural sector, 2022

44.6 Summary Challenges Face Women in the Agriculture Sector and Recommendations:

Table 18: Challenges Face Women in the Agriculture Sector

Challenge	Details	Recommendations

[34] Anindita Chakraborty, Mayada El-Zoghbi 05 May 2022 Gender Norms On and Off the Farm: Engaging Smallholder Women in Finance and Climate-Smart Agriculture. https://www.centerforfinancialinclusion.org/gender-norms-on-and-off-the-farm-engaging-smallholder-women-in-finance-and-climate-smart-agriculture/
[35] Updated based on Palestinian Central Bureau of Statistics, 2024. Data base of Labour Force Survey 2023. Ramallah-Palestine
[36] Updated based on Palestinian Central Bureau of Statistics, 2024. Data base of Labour Force Survey 2023. Ramallah-Palestine

Lack of Land Access and Control	Women are often denied inheritance rights and control over land due to traditional customs and societal pressures.	Legislative measures to guarantee land access and control for women.
Limited Access to Financing and Extension Services	Women face barriers in accessing state financing and agricultural extension services.	Increased availability of financing opportunities and dedicated extension services for women.
Low State Investments	Investments in agriculture tend to overlook women's needs, limiting their formal participation.	Allocation of state resources specifically for women smallholder farmers.
Feminization of Agriculture	The share of women in agriculture rose from 64.8 percent in 1980to 72.5 percent in 2010 due to male migration, leaving women responsible for unpaid agricultural production.	Programs to reduce women's manual labor burden, increase wages, and provide supportive infrastructure.
Barriers to Formal Participation	About 32.9 percent of women work informally in agriculture due to inheritance challenges and patriarchal customs.	Capacity-building programs and inclusion of women in formal agricultural policies.
Gender Wage Inequalities	Women receive lower wages than men despite representing a higher percentage of workers in the agricultural sector.	Wage reforms to ensure gender parity and fair pay for female agricultural workers.
Lack of Collective Power	Women have limited participation in cooperatives, leading to high costs and isolation.	Encourage cooperative membership, provide access to financing, training, and market connections.
Social and Psychological Challenges	Women's involvement is often unrecognized, leading to exclusion and added responsibilities.	Empower women through cooperatives, which promote belonging and shared costs and goals.
Health Impacts of Triple Burden	Women manage agricultural work alongside caregiving, housekeeping, and community involvement, leading to negative health outcomes.	Develop programs to alleviate manual labor and provide health-related support.

E- Challenges and Opportunities

Despite efforts by the Ministry of Women's Affairs (MoWA), UN Women, and international organizations to institutionalize gender into the vision, trends, and policies of Palestinian government institutions, significant obstacles continue to hinder progress. Addressing these obstacles is essential for transforming Palestine into a society rooted in social justice. Studies on women's rights and gender issues in agriculture and rural development highlight the primary challenges to mainstreaming gender and implementing gender-responsive budgets[37].

1.0 *Political, economic, and environmental constraints affecting productivity.* Palestinian agriculture faces multiple challenges that impact productivity, sustainability, and market access. These constraints are shaped by political instability, economic limitations, and environmental pressures. (i) *Political Constraints*: Land access restrictions: Palestinian farmers face limited access to agricultural land, particularly in Area C, where Israeli policies restrict farming activities. Trade barriers: Exporting Palestinian agricultural products is challenged by border controls, high transportation costs, and market restrictions. Water access limitations: Israeli control over water resources affects irrigation availability, reducing crop yields. (ii) *Economic Constraints*: High

[37] Based on FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en,2022

production costs: Farmers struggle with rising costs of fertilizers, seeds, and irrigation equipment, limiting profitability. Limited financial access: Only 6.2% of agricultural holders are members of cooperative societies, restricting access to loans and investment opportunities. Market instability: Dependence on regional trade partners makes Palestinian agriculture vulnerable to economic fluctuations and policy changes. (iii) *Environmental Constraints*: Climate change impact: Rising temperatures and unpredictable rainfall affect crop yields and water availability. Soil degradation: Overuse of land and limited access to sustainable farming techniques contribute to soil erosion and reduced fertility. Water scarcity: Palestinian farmers receive less than 30% of their required water supply, affecting irrigation and productivity. (iv) Institutional and Cultural Challenges: (i) Patriarchal Nature of Institutions: Although MoWA developed a participatory Cross-Sectoral Gender Plan, government institutions' internal environments remain patriarchal, rendering them ill-equipped to implement the plan's recommendations or strategies. Key ministries lack awareness of gender-sensitive policies and fail to budget for implementing the approved national strategy. (ii) Lack of Gender Budgeting: The Government's general budget excludes gender considerations, further undermining the Cross-Sectoral Gender Plan. (iii) Challenges Within Gender Units (GUs): Limited authority and capacity to mobilize support for the Cross-Sectoral Gender Plan's implementation. Lack of commitment from ministries to execute decisions, leaving GUs reliant on ministerial structures. Insufficient staff with the necessary capacity or skills to integrate gender mainstreaming. Inadequate budgets allocated to GUs.GU staff excluded from planning and budgeting processes due to unsupportive ministerial cultures. **Poor coordination between GUs and other directorates:** Lack of comprehensive, and updated sex-disaggregated databases in most ministries. **Deficient Monitoring and Evaluation Framework**: MoWA lacks a framework for monitoring and evaluation as well as the capacity to oversee the implementation of the National Cross-Sectoral Strategy for Promoting Gender Equality and Equity in the National Development Plan (2017–2022). **Absence of a Holistic Vision**: Financiers lack a comprehensive understanding of gender mainstreaming and its importance in gender-responsive budgeting for measuring development indicators. **Weak Role of Civil Society Institutions**: Civil society, including women's organizations, plays a limited role in ensuring gender accountability and evaluation. **Limited Focus on Gender-Responsive Budgeting**: **(i)** The absence of sustainable efforts undermines the effectiveness of gender integration processes.

2.0 Growth potential in agritech, sustainable farming, and cooperative-led initiatives. Palestine's agricultural sector has significant growth potential in agritech, sustainable farming, and cooperative-led initiatives, despite challenges such as land restrictions, water scarcity, and market dependencies. (i) Aggrotech Innovations: Smart irrigation systems are improving water efficiency**,** with drip irrigation increasing crop yields by 78%**.** Precision agriculture using drones, sensors, and AI-driven monitoring is helping farmers optimize fertilizer use and pest control**.** Greenhouse farming is expanding, allowing year-round vegetable production and reducing climate-related risks. (ii) Sustainable Farming Practices: Organic farming is gaining traction, with Palestinian cooperatives exporting organic olive oil and herbs to international markets**.** Agroforestry projects are being implemented to reduce desertification and improve biodiversity**.** Climate adaptation strategies**,** such as drought-resistant crops and soil conservation techniques, are helping farmers mitigate environmental challenges. (iii) Cooperative-Led Agricultural Growth***:*** Women-led agricultural cooperatives are expanding, with 6.2% of agricultural holders participating in cooperative networks**.** Fair trade certification is increasing market access for Palestinian farmers, particularly in olive oil and specialty crops. International partnerships are supporting cooperative-led agribusinesses, improving financial access and export opportunities[38].

3.0 *Policy frameworks supporting agricultural development in Palestine*. Palestine has established strategic policy frameworks to support agricultural development, sustainability, and economic resilience. These policies focus on land use, water management, trade, and cooperative-led initiatives. (i) National Agriculture Sector Strategy: The Palestinian Ministry of Agriculture developed the National Agriculture Sector Strategy (2017-2022), emphasizing resilience and sustainable development. The strategy prioritizes land conservation, irrigation efficiency, and agribusiness expansion. Agricultural institutions play a key role in policy implementation and farmer support programs. (ii) Agricultural Trade & Market Policies: The Agriculture Sector Strategy outlines trade policies to enhance regional and international market access. Fair trade agreements and cooperative-led export initiatives aim to strengthen Palestinian agribusinesses. Financial support programs help farmers overcome market barriers and production costs. (iii) Environmental & Sustainability Policies: Water resource management is a key focus, with policies promoting drip irrigation and climate adaptation strategies. Organic farming incentives encourage sustainable agricultural practices and soil conservation. Agroforestry projects aim to reduce desertification and improve biodiversity.

F- Government Policies and Institutional Support

1.0 *Government Policies and Institutional Support for Agriculture in Palestine*. Palestine has established strategic policy frameworks to support agricultural development, sustainability, and economic resilience. These policies focus on land use, water management, trade, and cooperative-led initiatives. (i) National Agricultural Strategies & Development Programs: The National Agriculture Sector Strategy (2017-2022) emphasizes resilience and sustainable development, focusing on land conservation, irrigation efficiency, and agribusiness expansion. The strategy prioritizes food security, rural development, and climate adaptation, with support from FAO and international partners. Institutional frameworks aim to strengthen agricultural services, cooperative networks, and financial inclusion. (ii) Subsidies, Funding Opportunities & Agricultural Extension Services: Government-backed subsidies provide financial support for fertilizers, irrigation systems, and sustainable farming practices. Microfinance programs help farmers' access low-interest loans, particularly for women-led agricultural enterprises. Agricultural extension services focus on training, technology adoption, and market access, improving productivity. (iii) Institutional Efforts to Improve Food Security & Rural Livelihoods: Food security initiatives promote local food production, cooperative farming, and organic agriculture. Rural development programs aim to enhance employment opportunities, infrastructure, and agribusiness growth. International partnerships support Palestinian farmers through trade agreements, fair trade certification, and export facilitation. (iv) Gender Mainstreaming in Policies, Strategies and Investment Plans on Food and Nutrition Security, Agriculture and Rural Development: The Palestinian Government's efforts to address gender inequality in the agricultural sector are embedded within broader national strategies aimed at enhancing livelihoods and fostering economic resilience. Here is a summary of the main frameworks and objectives[39]:

Key National Plans and Strategies:

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[38] Agri tech in 2025: Positioned for Growth 2025.

[39] **Source:** FAO. 2023. Gender, water and agriculture – Assessing the nexus in Palestine. Cairo

- National Agricultural Sector Strategy (NASS) – Resilience and Sustainable Development (2017–2022): Focuses on increasing high-value crop production, expanding cultivated areas, and strengthening livestock production. Aims to empower women and youth through small-scale agricultural projects and improved governance of the sector. Promotes investment in sustainable and inclusive agri-food value chains but falls short of addressing the unique challenges faced by women farmers comprehensively.
- National Plan "Putting Citizens First" (2017–2022) & National Development Plan (2021–2023): Addresses gender equality as part of the "Sustainable Development" pillar. Prioritizes social justice, poverty reduction, and agricultural sector support while promoting rural resilience and empowerment.
- Food and Nutrition Security (FNS) National Investment Plan (2020–2022): Strategic goals include ending hunger and malnutrition, doubling productivity and incomes for small-scale producers, and ensuring sustainable food production systems.

Cross-Sectoral Strategies

- Gender Equality Strategy (2017–2022): Focuses on legislative reforms, including women's inheritance rights, protection against gender-based violence, and promoting women's leadership and economic empowerment.
- Water Sector Plan (2017–2022): Aims to ensure equitable access to water for all uses, emphasizing geographical distribution.
- Second National Plan: Women, Peace, and Security (2020–2024):
- Enhances women's participation in decision-making, empowerment, and leadership, particularly for those in marginalized areas near the Barrier.
- Environment Sector Strategies (2020–2023):
- Focus on gender-sensitive policies in water and waste management while ensuring equal access to environmental services.

While the NASS and related plans emphasize resilience, food security, and gender equality, they fail to sufficiently address the systemic barriers women face in agriculture, including:

- Limited access to land and resources.
- Lack of ownership and control over agricultural profits.
- Insufficient measures to overcome social and legal constraints faced by female farmers.
- To truly empower women in agriculture, strategies should include:
- Tailored interventions to support women farmers and cooperatives.
- Mechanisms to address cultural and legal barriers.
- Expanded access to financing, agricultural tools, and modern technologies for women.

By integrating these aspects, national strategies can better promote gender equality while advancing agricultural development.

(v) Institutional and Financial Arrangements for Gender Mainstreaming in Agriculture and Rural Development

Efforts to institutionalize gender mainstreaming in agriculture and rural development in Palestine have involved both governmental and non-governmental initiatives. These arrangements include the creation of specialized units, financial mechanisms, and partnerships with international organizations to promote gender equality.

Key Institutional Arrangements

- Gender Units in Ministries: Established in 2005 by the Council of Ministers, 35 Women's Units were later renamed Gender Units (GUs) in 2008.These units are tasked with integrating gender considerations into ministerial policies, plans, and programs. Despite their creation, GUs have not been fully effective, as they are often treated as separate entities rather than cross-cutting units embedded within all ministerial activities.
- Gender Focal Point in the Ministry of Agriculture (MoA): Introduced in 2016, this role focuses on reviewing agricultural strategies, policies, and projects to ensure gender sensitivity. The gender focal point also works to align MoA programs with broader gender equity goals.

Financial Arrangements:
Gender-Sensitive Budgets: In 2009, the government mandated that ministries adopt gender-sensitive budgets to reflect their commitment to gender equality. However, the impact of this mandate has been limited due to challenges in implementation and integration.

Partnerships and Collaborations

Several organizations work alongside the Palestinian Government to promote gender equality in agriculture:

- Oxfam: Supports initiatives to empower women and strengthen their roles in agri-food value chains.
- UN Women: Focuses on gender-sensitive policy advocacy and capacity-building for women farmers.
- International Labor Organization (ILO): Promotes equitable labor practices for women in agriculture.
- National Civil Society Organizations: Play an active role in grassroots advocacy and providing training and resources for women.

Challenges and Recommendations

- Integration Issues: GUs lack the integration necessary for cross-ministerial influence.
- Funding and Support: Limited financial and technical resources hinder the effective implementation of gender-sensitive programs.
- Cultural Barriers: Patriarchal norms continue to impede women's participation and decision-making in agriculture.
- Strengthening GUs and fostering collaboration between governmental bodies and international organizations can help enhance gender mainstreaming efforts in the agricultural sector.

3.1.2 A Brief Overview on Informal Agriculture Sector in Palestine

The informal agriculture sector in the oPt plays a significant role in supporting livelihoods, especially for women, food security, employment, and local trade. It encompasses unregistered enterprises, household farming projects, and seasonal work, but it operates under systemic challenges and social constraints. Leading to challenges in financial access, market stability, and resource allocation. **Economic contribution**: (i) the informal sector accounts for 53 percent of total employment in Palestine, with 95 percent workers engaged in informal activities. (ii) Agriculture remains a key component, with small-scale farming, household-based production, and unregistered agribusinesses contributing to local food supply. (iii) the informal economy contributes 22 percent of Palestine's GDP, valued at USD 3.7 billion. **Characteristics of the Informal Agriculture Sector:** *Smallholders farm:* dominate the sector, with limited access to formal financial services and cooperative networks. *Unregistered agricultural enterprise:* Operate without official tax registration, affecting their ability to access government subsidies and trade benefits. *Unpaid Labor:* Women dominate informal agricultural employment, with 84 percent of women involved in unpaid family farm work, compared to 14 percent of men. Despite contributing to family profits, women lack ownership or control over the financial returns. *Seasonal Employment*: Informal agricultural roles are often temporary and lack stability, with women more likely than men to work without benefits or recognition for their efforts. *Home-Based Activities*: Women engage in home agriculture, cultivating vegetables, raising poultry and livestock, and increasingly adopting rooftop gardening practices, even in refugee camps.

Challenges in the Informal Sector:

Lack of Legal Protection: The absence of a legal framework leaves informal workers, especially women, vulnerable to exploitation and neglect. Without safeguards, their labor often goes unrecognized both socially and economically. *Social Stigmatization:* Women working informally face societal disapproval, particularly if employed in Israeli settlements. This contrasts with men, who are accepted as providers in the same context. Mobility Restrictions: Military checkpoints, violence, and limited transport options further constrain women's freedom to access markets or participate in broader agricultural activities. *Economic Barriers:* Women's unpaid labor is undervalued, and they often lack access to resources like mechanized equipment, land ownership, or formal financing, restricting their opportunities to improve productivity and income. *Limited financial access:* prevent informal farmers from securing loans and investment opportunities. Market instability: affects pricing, distribution, and trade expansion, particularly for small scale producers. *Policy interventions*: could improve formalization efforts, offering training, financial inclusion, and cooperative-led support.

Potential Interventions:

- Legal Frameworks: Establish protections and recognition for informal agricultural workers to ensure fair treatment and access to benefits.
- Resource Access: Expand access to agricultural equipment, financial services, and land ownership for women.
- Community Initiatives: Enhance support for home agriculture and rooftop gardening projects to create sustainable income-generating opportunities.
- Gender-Sensitive Policies: Address systemic biases and empower women's participation in all stages of agriculture, including marketing and decision-making.
- Distribution of Individuals by Economic Activity in the Informal Sector: The informal sector in the Occupied Palestinian Territory (oPt) reflects stark gender disparities and poses numerous challenges, particularly in agriculture. Here's an overview:
- Employment in the Informal Sector: In 2023, data for the West Bank shows significant differences in informal sector employment:
    - 46.2 percent of all employed individuals work informally.

- o 50.4 percent of males are employed in the informal sector, compared to 26.6 percent of females.

Implications:

The absence of protective mechanisms in the informal sector creates economic vulnerabilities for women and restricts their ability to achieve financial independence. Seasonal and temporary work, while critical to agriculture, fails to provide stability or recognition. These dynamics highlight the need for policy interventions that:

- o Formalize roles within agriculture.
- o Provide legal protections for informal workers.
- o Create gender-sensitive initiatives to empower women in informal sectors.

By addressing these systemic gaps, the informal agricultural sector can be transformed into a space that supports equitable participation and economic resilience for women[40]

Role of Women in Informal Agriculture:

Women make up **84 percent** of those working in informal agricultural settings, compared to **14 percent** for men. Their contributions span all stages of the production chain except for marketing and selling, which remain domains controlled by men. Patriarchal norms and legal frameworks, such as the Personal Status Law, reinforce limitations on women's ownership and control over agricultural profits. This deprives them of economic recognition and perpetuates their subordination in both family and societal structures.

1. **Income-Generating Activities:** Women often turn to home-based and community projects, such as: Home Food Industry: Producing and selling processed foods, such as dairy products, olive oil, and pickled vegetables. Rooftop Gardening: Cultivating vegetables, greens, and raising poultry, which has grown into a notable phenomenon, even in refugee camps. These activities provide economic benefits and foster community engagement, though they are hindered by systemic barriers such as restricted mobility, Israeli checkpoints, settler violence, and limited public transport in rural areas, especially in Area C.
2. **Community Collaboration:** Women are pivotal during collective agricultural events, such as the olive picking season, serving as catalysts for family and community cooperation. Their contributions often transcend personal agricultural roles, strengthening social ties and local economies.
3. **Decline in Agricultural Employment:** From 2000 to 2021, the agricultural sector experienced negative annual job growth, losing approximately **10,000 jobs**. Many workers shifted to low-productivity construction or traditional manufacturing activities, while the services sector saw six times more job creation. This transition reflects broader structural changes in Palestine's economy, with agriculture becoming less central to employment and productivity[41].

[40] FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en, 2022
[41] IMF, PALESTINIAN LABOR MARKET OUTCOMES, DYNAMICS, AND POLICIES, West Bank and Gaza: Selected Issues; April 14, 2023

3.2 Stakeholders Analysis

The agriculture sector in the West Bank involves a diverse range of stakeholders, including farmers, cooperatives, government agencies, NGOs, and international organizations. A stakeholder analysis typically examines their roles, interests, and influence on agricultural development.

Key stakeholders include:

- **Farmers and Cooperatives**: Smallholder farmers dominate the sector, with cooperatives playing a crucial role in supporting agribusiness and food security.
- **Government Institutions**: The Palestinian Ministry of Agriculture sets policies and strategies to enhance agricultural productivity and sustainability.
- **International Organizations**: Groups like the FAO provide technical and financial support to strengthen agricultural producer organizations.
- **Private Sector and Entrepreneurs**: Investments in green agriculture and circular economy initiatives are emerging, with assessments conducted to identify needs and opportunities

The table below identifies potential areas for collaboration and highlights how these partnerships can contribute to achieving gender equality in agriculture.

Table 19: Key Stakeholders and Potential Areas for Collaboration

Organization	Key Initiatives	Focus Areas	Impact on Women's Economic Empowerment
ILO (International Labour Organization)	Gender Equality & Women's Empowerment Program	Decent jobs, cooperative strengthening, workplace conditions	Supports women's cooperatives, reduces workplace discrimination, and advances financial inclusion
Oxfam	Beyond the Barriers: Promotion of Gender-Sensitive & Sustainable Rural Development	Women's economic empowerment, rural livelihoods, policy advocacy	Strengthens herders and Bedouin communities, expands market access, and improves resource availability
MOWA	National Cross-Sectoral Strategy for Promoting Gender Equality & Equity (2017–2022)	Women's entrepreneurship, legal reform, economic inclusion	- Promoting legislation to support small enterprises & working women- Increasing competitiveness of women-led agricultural products- Providing access to funding & expertise for women entrepreneurs.
UN Women	Gender-responsive policy advocacy, financial support for women's initiatives	Women's leadership, agribusiness, cooperative development	Promotes women's rights, expands entrepreneurship programs, and supports food security measures
General Directorate of Cooperatives (GDC)	Capacity-building for women's cooperatives, financial training	Marketing, product quality, international trade	Enhances product value, connects cooperatives to global markets, and supports financial literacy
FAO (Food and Agriculture Organization)	Seeds of Resilience Program, agricultural training	Sustainable farming, financial inclusion, cooperative development	Provides technical skills, promotes climate adaptation, and secures investment opportunities

RWDS (Rural Women's Development Society)	Advocacy for rural women's land rights and economic participation	Access to resources, leadership roles, skills development	Improves access to credit, enables land ownership, and strengthens decision-making power
Palestinian Ministry of Agriculture	Agricultural Development Program, Enhancing Agricultural Services Program, Administrative Program. Established a Gender Focal Point (2016)	Gender-sensitive agricultural policy, rural development, sustainability	- Integrating gender analysis in MoA programs. Aligning initiatives with **CEDAW Article 14 & SDGs**. - Developing gender-responsive training materials & technical support.
PLDC (Palestinian Livestock Development Center)	Sustainable animal farming & resource management	Livestock economy, cooperative training, business expansion	Strengthens livestock trade networks, improves dairy production, and creates employment opportunities
UNDP (United Nations Development Programme)	Rural development initiatives, access to financial services	Sustainable income generation, agricultural technology, entrepreneurship	Builds resilient agricultural systems, finances cooperative programs, and fosters women-led agribusiness growth
Ministry of Labor (MoL)	National Cooperative Sector Strategy (in partnership with ILO)	Women's workforce participation, labor rights, cooperative expansion	- Capacity-building for **women's cooperatives**. - Providing technical assistance for **business planning & financing**. - Strengthening cooperative sector staff education & youth literacy.
Cooperative Work Agency (CWA)	Established in 2018 to regulate and promote cooperatives	Cooperative regulation, financial oversight, governance support	- Expanding financial oversight & support for women-led cooperatives. - Strengthening cooperative structures & dispute resolution mechanisms. - Coordinating donor engagement for gender-sensitive cooperative projects.
Gender Units in Government Institutions	Established across 35 ministries (restructured in 2008)	Gender mainstreaming, policy development, government coordination	- Gender-sensitive budgeting for agricultural policies. - Coordination with MoA's Gender Unit to improve program targeting. - Capacity-building for gender policy reviews.
National Civil Society Organizations	Advocacy & financial support for women in agriculture	Women's legal rights, training, microfinance, agribusiness growth	- Training for **women's cooperatives** in management, planning & food production. - Supporting inheritance rights advocacy for **women in agriculture**. - Providing **micro-financing for small agricultural projects**.
Small Enterprise Center (SEC)	Business development support for agro-food enterprises	Branding, market access, small-scale agribusiness support	- Facilitating market linkages for **women-led agricultural products**. - Capacity-building in **branding & export strategies**.- Enhancing financial access through cooperative models.

Based on FAO, 2021, Country Gender Assessment of the agriculture and rural sector, 2022

Main Actors in Area C and the Northern Governorates:

Many organizations work in Area C, 15 of which can be considered main actors, as listed in the below table[42].

Table 20: Main Organizations Work in Area C

Organization	Main Services Provided	Focus Areas
Palestine Fair Trade Association (PFTA)	Union of farmers' cooperatives producing olive oil, dates, almonds, couscous, and sun-dried tomatoes. Supports organic farming, fair-trade certification, capacity building, and marketing	Fair-trade agriculture, organic farming, international market access
Agricultural Cooperatives Union in Palestine (PACU)	Merger of three unions supporting agricultural and livestock cooperatives	Cooperative farming, livestock management, olive oil production
Union of Cooperative Societies for Saving and Credit (UCASC)	Economic empowerment of Palestinian women through legislative advocacy and support for small enterprises	Microfinance, cooperative savings, women's entrepreneurship
Agricultural Development Association (PARC)	Programs in women's empowerment, land development, modern agriculture, and resource access	Rural development, sustainability, gender inclusion
Welfare Association	Provides training, grants, scholarships, and economic empowerment for women-headed households	Education, social welfare, financial assistance
Care International	Inputs, training, market connections, business planning, microfinance, and medical services	Women and youth empowerment, food security, healthcare
UNRWA	TVET programs, scholarships, job training, health services, infrastructure support, microcredit programs, and women/youth initiatives	Refugee assistance, education, vocational training
UNFPA	Studies, policy recommendations, youth peer education, civic engagement, and GBV support	Health programs, gender equality, advocacy
UNDP	Programs like DEEP, CRDP, and FAIR focused on economic empowerment and infrastructure resilience	Development planning, entrepreneurship, financial inclusion
USAID	Enhances teaching methodologies, school access, infrastructure, career counseling, and scholarships	Higher education, rural infrastructure, vocational training
Partners for Sustainable Development (PSD)	Supports technology integration and social enterprise development through education programs	Digital innovation, entrepreneurship, women's economic inclusion
Economic and Social Development Center of Palestine (ESDC)	Promotes food security, women/youth empowerment, and livelihoods through cooperatives	Capacity-building, food security, cooperative networks
Small Enterprise Center (SEC)	Export promotion, capacity-building for cooperatives, product quality improvement	Trade facilitation, cooperative-led agriculture, entrepreneurship
UN Women	Sustainable business support for women entrepreneurs, focusing on market linkages and regulatory policies	Women's leadership, agribusiness, business development
UNICEF	Advocates for youth education and entrepreneurship programs	Education, economic empowerment, innovation

[42] World Bank, (May 2018), West Bank and Gaza Social Inclusion - Marginalized Groups Avenues for Social and Economic Inclusion in Livelihoods in West Bank and Gaza

Juzour for Health and Social Development	Supports community health initiatives and social development	Health, policy advocacy, social services
Education for Employment (EFE)	Job placement, entrepreneurship training, alumni engagement programs	Youth employment, skills training, career pathways
Save the Children	Supports youth-at-risk with employment and education programs	Child protection, youth development, education access
Palestinian Youth Union (PYU)	Focuses on media advocacy, capacity building, economic empowerment, and community development	Political advocacy, youth leadership, cultural initiatives
YMCA	Vocational education, rehabilitation programs, and women/youth training	Skills development, rehabilitation, capacity-building
YWCA	Promotes women's rights, economic development, and youth leadership initiatives	Women's empowerment, rural enterprise, cooperative growth
GIZ	TVET, employment promotion, social participation, and gender-focused leadership training	Labor market development, gender equality, social inclusion
ActionAid	Youth empowerment via REFLECT groups and capacity-building programs	Community-driven development, gender-sensitive training

To promote gender equality and empower women in agricultural cooperatives and the rural sector of Palestine, collaboration with a range of partners is essential. These partners include public sector institutions, UN agencies, international NGOs, development partners, and civil society organizations. Their combined efforts aim to advance gender equality in agriculture and rural development through strategic partnerships and well-coordinated initiatives[43].

Key Opportunities for Collaboration Include:

- Advocacy and Policy Work: Supporting policy frameworks and creating awareness on gender equality in the agricultural sector.
- Project Implementation: Delivering impactful programs that address the needs of women in cooperatives and rural communities.
- Technical Support and Oversight: Providing expertise and monitoring for agricultural programs and projects.
- Funding and Resources: Securing financial resources to support agricultural initiatives and build institutional capacity.

[43] Based on FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en,2022

3.3 Overview of Agricultural and Agro-Food Cooperatives in Palestine

Agricultural and agro-food cooperatives in Palestine play a critical role in supporting rural livelihoods, food security, and economic sustainability. These cooperatives help farmers access markets, share resources, and improve production efficiency, despite challenges such as land restrictions, financial barriers, and trade limitations. (i) *Governance & Structure of Agricultural Cooperatives*: Agricultural cooperatives in Palestine operate under legal and institutional frameworks that regulate their governance and financial management. The Cooperative Work Agency (CWA) oversees cooperative registration, financial oversight, and compliance with cooperative laws. Transparency, accountability, and participation are key principles guiding cooperative governance. (ii) *Role of Cooperatives in Agricultural Development:* Enhancing food security: Cooperatives support local food production, distribution, and sustainable farming practices. Market access: Cooperative networks help farmers sell products locally and internationally, particularly in olive oil, dairy, and specialty crops. Financial inclusion: Cooperatives provide microfinance opportunities, investment support, and shared resources to smallholder farmers. (iii) *Challenges Facing Agricultural Cooperatives*: Limited financial access: High loan interest rates and restricted banking policies hinder cooperative expansion. Trade barriers: Export restrictions and market instability affect cooperative-led agribusiness growth. Governance issues: Some cooperatives struggle with internal management inefficiencies and regulatory compliance. (iv) *Policy Recommendations & Growth Potential:* Strengthening cooperative governance through policy reforms and financial transparency measures. Expanding financial support for cooperatives via government-backed microfinance programs. Encouraging cooperative-led agritech innovations to improve productivity and sustainability.

Women's Participation in Agricultural Cooperatives: Statistics & Trends

- Women represent only 16% of cooperatives in Palestine, despite carrying out 60% of productive and reproductive activities, especially in rural areas.
- Women's share in cooperative general assemblies is merely 15%, and their representation in administrative committees is even lower.
- Women-led cooperatives face financial barriers, with limited access to credit and investment opportunities.

Women-led Cooperatives in the Northern West Bank play a crucial role in economic empowerment, agricultural sustainability, food processing, and social development. Despite challenges such as limited financial access and market restrictions, these cooperatives have successfully created employment opportunities, strengthened local economies, allow women to share resources, access financial opportunities, collectively market their products, and fostered community resilience.

Table 21: Key Women -Led Agricultural Cooperatives in Northen West Bank

Cooperative	Location	Main Activities	Roles of Women
Qabalan Women's Cooperative	Nablus	Agro-food processing (Freekeh, whole grain wheat flour, sambousek)	Women manage production, packaging, and food safety. FAO provided technical support, including a shock freezing system.
Bezaria Cooperative	Jenin, Tulkarm	Supermarket operations, community services	Women participate in financial management, sales, community support programs. Generates USD133,030 in annual profits, benefitting 427 families.
Beita Cooperative	Nablus	Poultry farming, olive oil soap production (Palastinia brand)	Women lead product development, marketing, and cooperative administration.
Al Noemeh Cooperative	Northern West Bank	Small business training, financial literacy programs	Women entrepreneurs receive business development support and cooperative training.

Participation in Active Agricultural Cooperatives in the Northern Governorates:

Participation is defined as the ability of both men and women to freely express their opinions and engage in decision-making, either directly or indirectly. Cooperative councils and boards play a crucial role in fostering participation by conducting consultation sessions with all members of the general assembly, aiming to strengthening engagement and enhance the cooperative association[44]. However, a review of literature, documents, previous studies, interviews, and surveys reveals significant weaknesses in the implementation of participation within agricultural cooperatives[45].

Key Findings:

- General Assembly Meetings - Nearly half of the agricultural cooperatives have not held general assembly meetings in the past three years. This lack of engagement demonstrates a failure to uphold the principle of participation and constitutes a violation of legal provisions.
- Gender Imbalance in Participation- Women's participation in agricultural cooperatives remains significantly limited. Agency data shows that, out of 10,829 cooperative members[46], only 1,119 are women, compared to 9,710 men. This disparity highlights system flaws in participation, raising concerns about legal compliance and weak governance practices.
- Survey Findings on Women's Participation- Asurvey conducted by AMAN[47] revealed low participation among women, particularly in seasonal cooperatives such as the olive pressing period, or during events involving both sexes. Women's engagement was also weak in associations lacking an effective governing body or those formed by small groups of farmers. Additionally, the gender gap widens further in general assembly meetings.

A survey conducted by AMAN Further Revealed Poor Participation of Women:

- Women's participation remains particularly low in seasonal cooperatives, such as during the olive pressing period or mixed-gender events.
- Cooperatives without effective governing bodies or those formed by small farmer groups tends to exhibit lower levels of women's involvement.
- The participation gap widens further in general assembly meetings, highlighting governance challenges and structural barriers to inclusion.

This analysis emphasizes the urgent need for reforms to promote inclusive practices and ensure equal opportunities for women's participation in agricultural cooperatives.

Efficiency and Effectiveness in Active Agricultural Cooperatives in the Northern Governorates

Efficacy refers to achieving the goals of cooperatives within approved plans and strategies, while efficiency entails the optimally use of available resources to meet those objectives. Effective management and competent resource utilization are essential for ensuring continued progress, prosperity, and sustainable development. These efforts should benefit cooperative associations and their broader community members[48]. Based on a review of literature, previous studies, interviews, and a survey conducted by AMAN, several weaknesses in efficiency and effectiveness within agricultural cooperatives were identified:

- Deficits in the Agricultural Cooperative Sector- Agricultural cooperatives are the only cooperative sector where deficits exceed surpluses. On average, agricultural cooperatives recorded a net deficit of 1,497 JDs per cooperative.

44 The Good Governance Guidebook for Cooperatives in Palestine (ARIJ), 2012, page 22.
45 AMAN, December 2021 Governance of Agricultural Cooperatives in Palestine, Report No. 198
46 Cooperative work Agency Annual Achievement Report 2019 - Palestine, page 37
47 AMAN, December 2021 Governance of Agricultural Cooperatives in Palestine, Report No. 198
48 The Good Governance Guidebook for Cooperatives in Palestine (ARIJ), 2012, P. 54

- Dissolved or Cancelled Cooperatives- A total of 232 agricultural cooperatives registered in the West Bank have been dissolved or cancelled.
- Wage Earners in Cooperatives- While cooperatives are intended to enhance members' economic conditions, contribute to community development and combat unemployment, data indicates limited employment impact:
  - There are 536 wage earners across all cooperatives.
  - Only 32.6 percent of agricultural cooperatives employ paid workers.

The establishment of cooperatives is designed to achieve two primary objectives:

- Improving the economic conditions of members.
- Fostering sustainable development. However, findings indicate significant inefficiencies in meeting these goals due to fiscal deficits, dissolved cooperatives, and limited employment opportunities.

A detailed table[49] accompanying this analysis provides a numerical breakdown of cooperatives with fiscal deficits, surpluses, and zero deficits, offering further insights into the challenges faced by agricultural cooperatives in the region.

Table 22: Numbers of Agricultural Cooperatives with a Fiscal Deficit, Surplus or Zero, per Governorate

Governorate	Even	With Deficit	With Surplus	Total
Jenin	1	17	13	31
Tubas	3	3	6	12
Tulkarem	0	10	8	18
Nablus	0	10	9	19
Qalqilya	0	9	3	12
Salfit	1	5	5	11
Total	**5**	**54**	**44**	**103**

The published research and mapping exercise identify significant challenges threatening the survival and continuity of agricultural cooperatives. These issues, particularly in terms of efficiency and effectiveness, are underscored by the following key points: **Financial Deficits**: The agricultural cooperative sector consistently operates at a deficit, with the financial shortfall exceeding any surplus. **Exacerbating Factors**: (i) Israeli policies and restrictions affecting the sector. (ii) Insufficient government support and the absence of protective measures for agricultural production. (iii) Internal governance issues within cooperatives.

Agricultural cooperatives serve as voluntary social organizations within local communities, built around shared interests. Despite variations in size and member engagement, these cooperatives play a crucial in advocating for the agricultural sector by: (i) Providing collective bargaining power to influence government policies and decisions. (ii) Serving effective platforms for introducing innovative techniques to enhance agricultural production and processing. (iii) Mobilizing resources to support broader agricultural development efforts. Their significance lies in their ability to drive progress within the agricultural sector, particularly for smallholder farmers and rural communities.

To support the sustainability and expansion of agricultural cooperatives- particularly small and women-led cooperatives- all stakeholders, including government agencies and cooperative unions, must adopt proactive measures. Key recommendations include: (i) **Protecting Financial Stability**: -Provide targeted financial support to distressed cooperatives, ensuring sustainable operations. Facilitate access to credit and

[49] The State of Cooperatives in the West Bank at the end of 2017, the Cooperative Work Agency, Palestine P.90.

investment opportunities for women-led cooperatives. (ii) **Safeguarding Production**- Strengthen marketing strategies for cooperatives products to enhance market access and visibility. Protect agricultural inputs and outputs within Palestine's free-market economy and neoliberal landscape. (iii) **Addressing Market Monopolies**- Reduce the near-monopoly of private companies controlling agricultural resources in plant and animal production, as it disproportionately impacts small cooperatives. Promote fair competition and policy reform that safeguard cooperative autonomy. These measures are essential for strengthening agricultural cooperatives and promoting equitable development across the agricultural sector. Implementing **inclusive policies, financial interventions, and market protections** will ensure **long-term sustainability** and **economic empowerment**, particularly for **women-led cooperatives**.

3.4 Agricultural Value Chains and Marketing

The agricultural sector in Palestine faces significant challenges related to marketing capacity, a critical component of agricultural VCs. The absence of structured marketing systems and clear guidelines negatively impacts farmers' income, limiting their ability to sustain themselves or generate adequate profits from their crops[50].

Challenges in Agricultural Marketing: (i) Lack of organized market structures – Farmers struggle with unstable pricing, inconsistent demand, and insufficient distribution channels. (ii) Limited access to market information – Many agricultural producers lack reliable data on pricing trends, demand fluctuations, and consumer preferences. (iii) Restricted transport networks – Poor infrastructure and high transportation costs prevent farmers from accessing profitable markets[51].
This Research indicates that farmers in Palestine face significant barriers in accessing larger markets, impacting their incoome and business sustainability. **Market Distribution**: 60 percent of farmers sell products to local governorate markets, while 38 percent sell directly to agents on their farms to minimize transportation costs. Only 2 percent of farmers export products, largerly due to financial constrains, poor infrastructure, and weak international market ties. **Gender -Specific Barriers in Agricultural Trade:** women farmers face additional challenges, including: (i) unstable market conditions-selling at local fairs is financially burdensome and unpredictable. (Ii) unfair pricing practices- women producers often receive lower prices, with expecations to provide discounts. (iii) limited participation in cooperatives- cultural barriers limiting women's participation in mixed-gender cooperatives, reducing economic opportunities. Exploitation in olive trade- women expereince mobolity restrictions and social vulnerabilities, leading to predatory pricing by traders. (iv) Structural discrimination – Policies and resource limitations further marginalize women in agricultural trade, reinforcing poor working conditions.

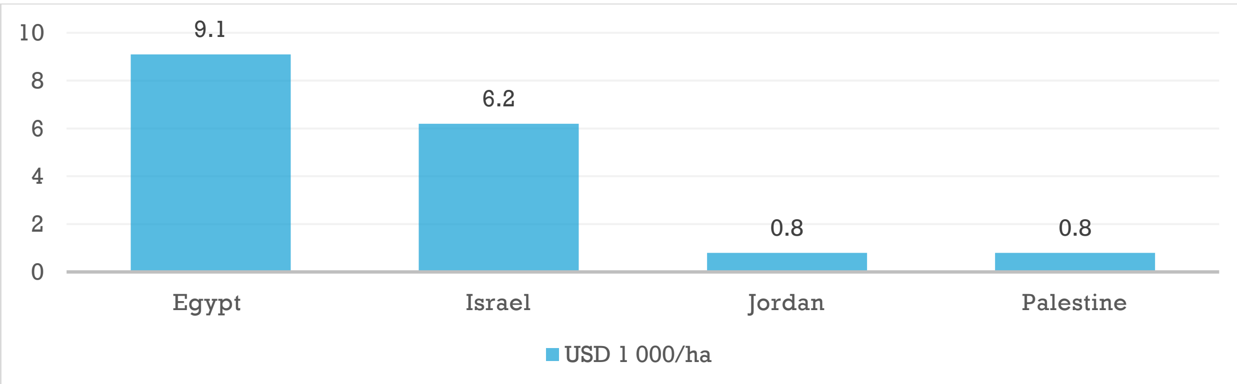
Gender-Specific Barriers in Agrifood Trade: The agrifood sector in the oPt is essential for sustainable food systems and economic development, yet it faces significant constraints. Key challenges: (i) Political instability, and resource control-Israel control over natural resources, movement restrictions, and settlement expansions have severely impacted the agriculture and manufacturing. (ii) Economic Distortions – The economy has become overly dependent on non-tradable sectors such as services, finance, and public administration, reducing agricultural contributions to GDP. (iii) Declining Agricultural Share – The agrifood sector's contribution to GDP dropped to just 6.4% (FAO, 2018), despite its importance in livelihoods and community resilience[52].. (iv) Land Fragmentation & Weak Institutions – Years of occupation and policy instability have left agrifood VCs fragile and unable to maximize production potential. (v) Reduced Labor Productivity – Agricultural productivity declined by over 50%, leading to lower wages and reduced incomes for farming communities. (vi) Market Infrastructure Deficiencies –

50 ARIJ, 2015
51 Based on FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en,2022
52 FAO, European Union and CIRAD. 2023. Food Systems Profile - Palestine. Catalyzing the sustainable and inclusive transformation of food systems. Rome, Brussels and Montpellier, France. https://doi.org/10.4060/cc7323en

Weak wholesale markets, retail outlets, and food safety laboratories make the farm-to-fork process inefficient and costly. (vii) Comparative Disadvantages – Palestinian farmland yields lower returns compared to neighboring countries like Egypt and Israel due to limited investment in agricultural efficiency[53].

In summary, while the agrifood sector remains central to Palestinian livelihoods and food security, addressing its constraints—ranging from political barriers to infrastructural gaps—remains critical to unlocking its full potential for economic and social development.

Table 23: Agriculture Value Added Per Hectare Of Agricultural Land (2016 Data) - USD 1, 000/Ha



Source: FAO. 2021. FAOSTAT Production Database. In: FAO. Rome. Cited 20 March 2023. www.fao.org/faostat/en/#data

In 2022, agricultural productivity in Palestine reached **2,309 kg per hectare**, marking an improvement from **2,252 kg per hectare** in 2021, but still significantly below the global average of **3,866 kg per hectare**. The underperformance of agrifood value chains in Palestine stems from multiple root causes:

- Climate Change: Impacts production systems, leading to inefficiencies and resource degradation.
- Weak Institutions: Public institutions and industry associations lack the capacity to implement effective measures or enforce regulations.
- Israeli Occupation: Restrictions on movement, resource control, and settlement expansion hinder agricultural development.
- Changing Lifestyles: Shifting dietary habits and reduced demand for traditional food products weaken local markets.

Recommendations for Strengthening Agricultural Value Chains: To strengthen the agrifood sector's resilience in the oPt, targeted interventions can help mitigate ongoing challenges and safeguard farmer livelihoods. Proposed actions include:

- **Cost-Share Mechanisms for Inputs:** Facilitating cooperation among farmers or leveraging donor-funded cost-sharing projects could enable the procurement of high-quality agricultural inputs. These initiatives would not only enhance production levels and quality but could also extend to providing essential infrastructure like greenhouses, net houses, irrigation systems, and critical farming equipment.
- **Introduction of Cold Storage Facilities**: Establishing cold storage units is vital during border closures, ensuring produce with a short shelf-life retains its freshness. These facilities could also serve as freezing units' post-conflict, shielding farmers from market price fluctuations, securing offseason produce at higher prices, and supporting exports to Israel and other international markets.

[53] From a World Bank study conducted in 2013, it was concluded that the agriculture value added potential of Area C of the West Bank in the absence of restrictions was more than USD 704 million – approximately twice as much as the agriculture value added in 2012

- **Improved Access to Financing**: Financial support is critical for small farmers. Mechanisms such as loan guarantee funds or subsidies to cover interest rates on loans—whether new or existing—can provide farmers with the capital needed to invest in and sustain their agricultural ventures.

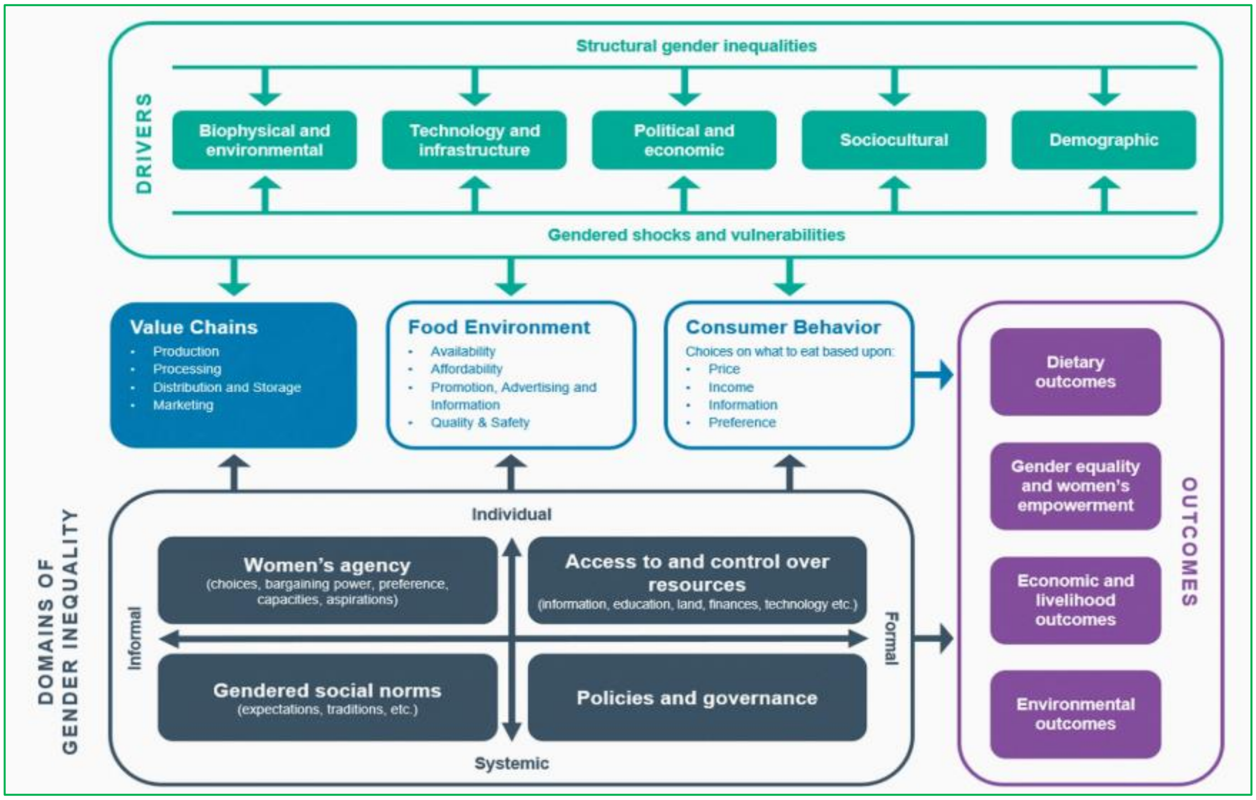
Women's roles in agricultural and off-farm value chains are vital yet often undervalued due to societal norms and gender-specific barriers. An assessment examining the dynamics of women's empowerment, gender equality, and participation in these value chains offers key insights:

- **Node-Specific Empowerment**: The empowerment experienced by women depends on the specific node of the value chain they engage with and varies across individual and household characteristics. Contexts, including geographical location and cultural norms, significantly influence the empowerment outcomes of value chain participation.
- **Entrepreneurship and Wealth**: Wealthier households may have greater access to entrepreneurship opportunities, but wealth—measured by asset ownership—is not always empowering for women. Increased market involvement tends to correlate with greater gender equality, regardless of household wealth levels.
- **Education and Training:** Higher education levels are positively linked with empowerment for both men and women, though the strength of this correlation varies. While training and extension services contribute to empowerment, they may also widen gender disparities within households if not designed inclusively.

Considerations for Interventions: The success of food system interventions relies on understanding local social and cultural dynamics. Programs must avoid exacerbating gender inequalities by considering the implications of participation at various value chain nodes. Tailored Approaches:

- Interventions should be carefully designed to address specific needs at different value chain stages, considering both the household and community context.
- This highlights the complexity of empowering women in agricultural value chains, emphasizing the need for socially sensitive and well-informed initiatives to promote gender equality while fostering food system development.

Figure 3: Women's Empowerment and Gender Equality in Agricultural VCs



Source Gendered Food Systems: Njuki et al. (2021), framework adapted from de Brauw et al. (2019)

The three components of the food system—production, distribution, and consumption—along with the presence of gender (in) equalities, significantly shape food system outcomes. These outcomes include dietary diversity and nutrition, gender equality and women's empowerment, economic well-being and livelihoods, as well as environmental sustainability. Achieving transformation within food systems to empower women and advance gender equality requires acknowledging the existing gender disparities across the value chains. It also involves identifying strategic areas for interventions that aim to reach, benefit, and empower women, while systematically addressing gender inequalities across all related dimensions.

Sustainable and Inclusive Agri-Food Value Chain Development:

Rationale While the development of agri-food value chains in Palestine faces numerous challenges—largely stemming from the Israeli occupation, including restrictions on internal movement, cross-border trade, and customs—the sector remains pivotal to the national economy and food security. Despite high production and transaction costs, promising market opportunities exist for Palestinian horticultural products both locally and internationally. Agriculture and the agri-food industry currently contribute 30 percent of the country's export value.

Notable Opportunities Include:

- Export Potential: High demand for premium products like dates, fresh herbs, za'atar, "Freekeh," and Maftoul exceeds supply.
- Market Advantages: Palestinian farmers benefit from seasonal advantages, proximity to import markets (e.g., Gulf States), and accumulated agricultural know-how.
- Domestic Demand: Local agribusinesses require stable supplies of raw materials for meat, dairy, and aquaculture, reflecting opportunities for growth in these areas.

Priority Value Chains (National Investment Plan 2020–2022):
To achieve food security and enhance GDP contributions, priority should be given to value chains that maximize economic output per unit of water or land while remaining sustainable and viable. The most promising value chains include:

- High-Value Crops: Dates, olive oil, fresh herbs, specialty spices, fruits (such as table grapes, pomegranate, almond, avocado, guava), and berry crops (e.g., raspberry, strawberry), including prickly pear.
- Livestock and Fisheries: Red meat (particularly small ruminants) and inland fisheries to meet growing domestic demand for fish.
- Criteria for Prioritization
    - Water Efficiency: Output per unit of water used.
    - Market Size: Viability in domestic and export markets.
    - Job Creation: Opportunities for youth and women, particularly in rural areas.

Stakeholder Recommendations:
Stakeholders have identified key areas requiring attention:

- **Strengthening the Enabling Environment:** Reform the legal and fiscal frameworks, including tax refund laws, which currently hinder agricultural investments. Enhance food safety, consumer protections, and financial inclusion—especially for women and youth.
- **Infrastructure Development:** Improve access to rural infrastructure, irrigation systems (including treated wastewater), electricity, and communication networks. Establish a robust market information system to facilitate better access to data and knowledge.

Steps for Value Chain Optimization:
Developing agri-food value chains requires a combination of qualitative and quantitative analyses.

Key actions include:

- Defining goals and identifying target groups, particularly women.
- Establishing clear criteria for selecting and prioritizing value chains.
- Conducting rapid assessments and scoring potential opportunities.
- Developing comparison matrices to guide stakeholder consultations and decision-making.
- Deep sectoral studies are essential to inform targeted interventions, ensuring that efforts align with market demands and sustainability goals.

This approach highlights the importance of strategic investment and tailored policies to unlock the full potential of Palestinian agri-food value chain

3.3.1 Key Challenges Affecting Women in Agricultural Value Chains:

(i) Land Fragmentation: Smallholder women farmers face difficulties in achieving economies of scale, resulting in higher production costs. **(ii)** Fragmentation limits the introduction of innovative farming, harvesting, post-harvesting, and marketing techniques, reducing productivity and profit margins. **(iii)** Weak Farmer Organizations: Limited capacity for collective marketing and selling impairs women's bargaining power. Poor delivery of extension services, market information, and business development services adds to inefficiencies. **(iv)** Post-Harvest Losses and Market Access: Poor post-harvest practices lead to food waste and reduced market viability. Women struggle to access markets, facing challenges in negotiating with traders and overcoming systemic constraints. **(v)** Social and Structural Barriers: Social norms, asset restrictions (especially land and money), and inequitable employment conditions hinder women's engagement with food systems. The commercialization of food systems often excludes women from high-value processing and marketing activities.

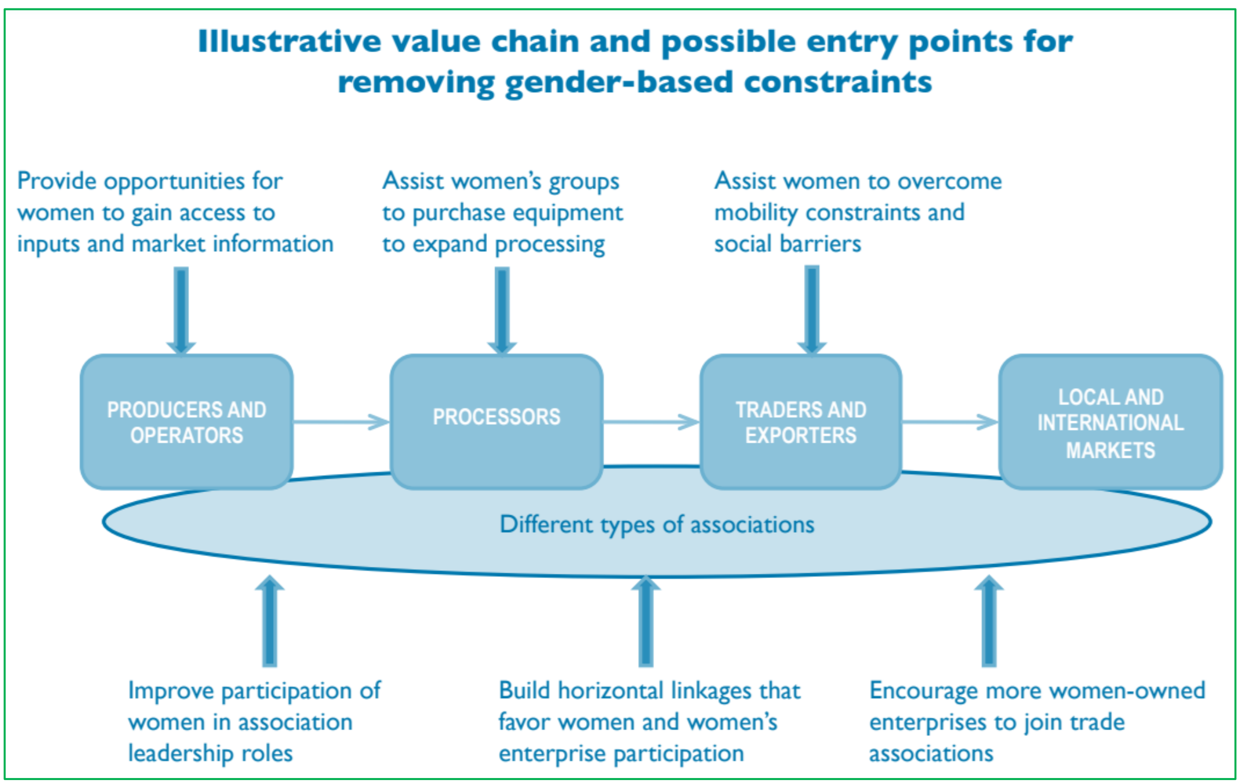
3.3.2 Proposed Interventions for Value Chain Development:

(i). Enhancing Women's Roles in Existing Value Chains: Increase participation in nodes with potential for value addition, such as processing and marketing. Develop tailored training programs to improve efficiency and expand women's expertise in high-value products. **(ii)** Expanding Opportunities in New Value Chains: Facilitate women's entry into emerging value chains through targeted financial support, technology access, and capacity-building initiatives. Strengthening (iii) Farmer Organizations: Empower organizations to provide sustainable extension services, market information, and collective marketing platforms: Promote collaboration among women farmers to amplify their bargaining power and streamline post-harvest activities. **(iv)** Improving Market Inclusion: Focus on addressing barriers such as social norms and asset constraints to increase women's representation in value chains. Establish programs to support women's involvement in marketing, distribution, and commercialization processes. **(v)** Holistic Strategy Development: Conduct in-depth assessments of final value chains to identify market-based interventions tailored to women's needs. Align interventions with local contexts, addressing structural and social factors that impact women's empowerment.

3.3.3. Strategic Focus Areas for Removing Gender-based Challenges

(i) Recognize that increased market inclusion does not automatically lead to empowerment. **(ii)** Design interventions that ensure women gain control over income and resources, thereby improving their bargaining power within households and communities. **(iii)** Integrate gender-sensitive policies that reflect the diverse challenges and opportunities within specific value chains and geographical contexts.

Figure 4-: Illustrate VC and Possible Entry Point for Removing Gender-based Constrains



CHAPTER 4: PRIMARY SURVEY OF WOMEN LED COOPERATIVE IN THE NORTH OF THE WEST BANK FINDINGS AND ANALYSIS

Based on the results of the mapping exercise and desk review conducted in Northern West Bank Governorates (NWBGs), the consultant engaged with 60 cooperatives and representative organizations across six governorates—Jenin, Tubas, Qalqilya, Tulkarm, Nablus, and Salfit—representing the NWBGs. Of these, 40 completed and valid survey responses were collected, forming the core dataset for the analysis. This survey provides critical insights into cooperative structure, challenges, and opportunities within the region, supporting further strategic interventions and policy recommendations for agricultural development and women engagement.

This research focuses on the high-potential products produced by women-led cooperatives, with a particular emphasis on primary production processes. Findings from both primary and secondary research indicate that these products hold significant potential in terms of international market demand, value addition opportunities, women's employment and economic inclusion, and innovation in agriculture practices.
While the research highlights specific products, it does exclude others, as value chain actors often manage a diverse range of goods, particularly during post-harvesting processing and distribution.

The primary objective of this assessment is to: (i) identify key factors affecting women-led cooperatives within agricultural VC. (ii) provide actionable recommendations to narrow gender gaps in the secotr. (iii) guide decision-makers in developing interventions that empower women in smallholder communities across the NWBGs and increase economic opportunities for female farmers and post-harvest workers.

4.1 Women -Led Cooperatives Charactaristics in Northern West Bank Governorates

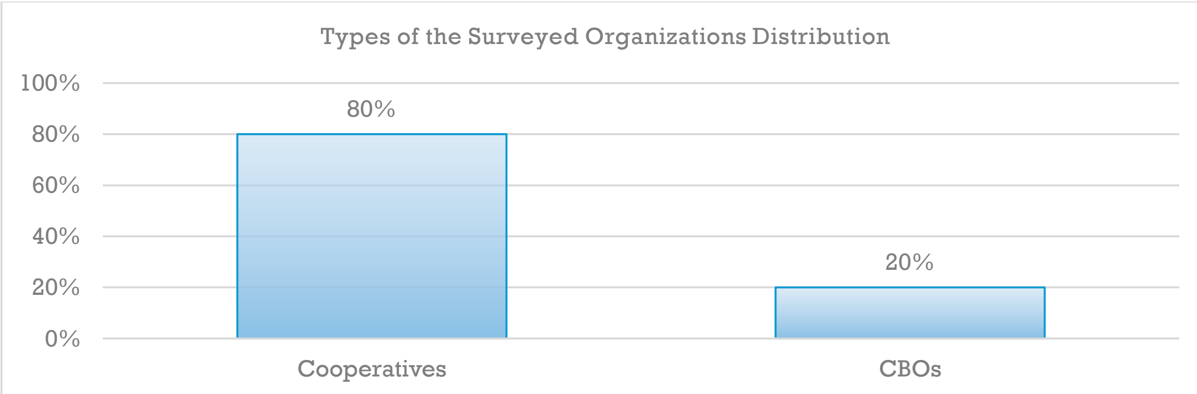
4.1.1 Legal Types of the Surveyed Organizations

The survey responses reveal notable trends regarding organizational preferences and registration status among respondents:

- **Preference for "Cooperative"**: "Cooperative" was the predominant choice, selected by 80 percent of respondents (32 out of 40). In comparison, "CBO" accounted for 20 percent (8 out of 40), highlighting a significantly lower preference.
- **Registration Status**: An impressive 98 percent of the surveyed organizations are officially registered with government entities. Of these, the majority (69 percent) are registered with the Cooperative Work Agency under the Ministry of Labor, while the remaining 31 percent are registered with the Ministry of Interior.

These findings underscore the strong preference for cooperative structures and their formal registration with government institutions, reflecting their alignment with operational and community goals.

Figure 5: Types of Surveyed Organizations



Agricultural cooperatives are a widely adopted model for crop and livestock production, offering numerous economic and social benefits. These advantages can be both direct—such as improved net margins or cost savings—and indirect, influencing market pricing and enhancing the quality of goods and services. While some benefits become apparent immediately after the establishment of a cooperative, others emerge over time.

Key Benefits of Agricultural Cooperatives: (i) Democratic governance and operational transparency. (ii) Increased profits for farmers. (iii) Enhanced product and service quality. (iv) Reduced input supply costs. (v) Access to larger markets and improved competitiveness. (vi) Legal and regulatory support. (vii) Significant contributions to rural development.

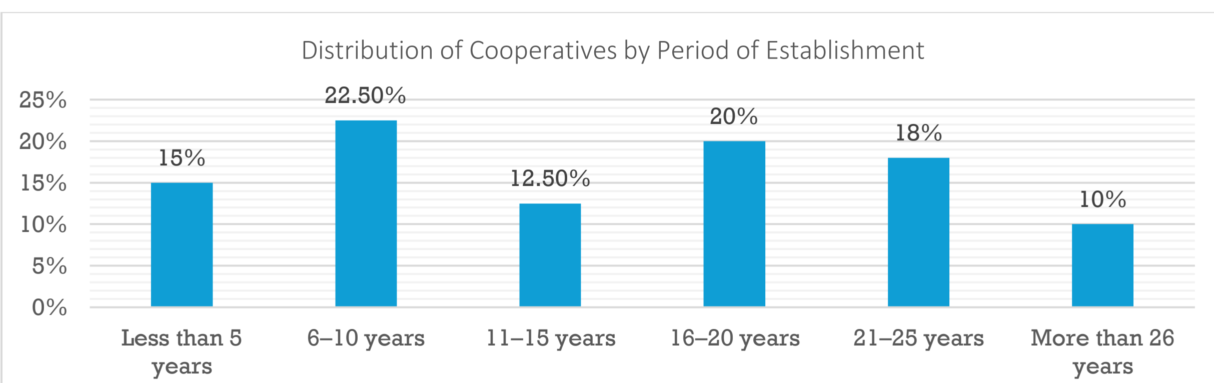
4.1.2 Length of Operations -Year of Establishment

The data highlights a noteworthy trend: only **15 percent** of the surveyed cooperatives were established after 2020. This indicates that the majority have extensive years of operational experience, which is a promising indicator of their potential. Experienced cooperatives often excel in several critical areas, including:

- Governance: Effective decision-making processes and leadership structures.
- Business Performance: Stronger financial stability and operational efficiency.
- Social Capital: Enhanced trust, collaboration, and community support among members.

The longevity and accumulated expertise of these cooperatives contribute significantly to their overall success and resilience, fostering stronger foundations for sustained growth and impact.

Figure 6: Distribution of Cooperatives by Period of Establishment



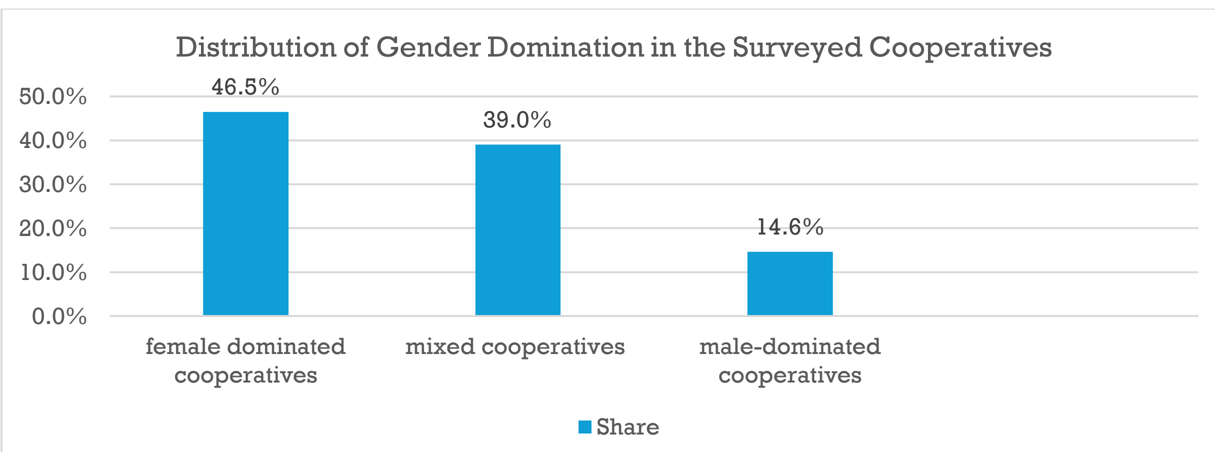
In the six governorates, **37.5 percent** of the surveyed cooperatives have been operational for **10 years or less**, while the remaining **62.5 percent** have been active for over a decade. This distribution reflects a consistent pattern across all six governorates. When examined within the context of ongoing agricultural intervention programs, it can be inferred that the mobilization of over one-third of these cooperatives may have been facilitated by previous and current agricultural initiatives. Sustainability, often driven by self-reliance, tends to correlate with the length of operational history—cooperatives with longer histories are likely to exhibit higher levels of sustainability.

This finding underscores the importance of prioritizing the **sustainability** of cooperatives. Intervention strategies should focus on empowering women-led cooperatives to become self-sufficient, ensuring their continuity and success beyond the duration of the programs that initially supported their establishment. Without such measures, there is a risk that these cooperatives may cease to exist once external support ends. The validity of this conclusion is further reinforced by data from the Cooperative Work Agency (CWA), which highlights challenges faced by non-operational cooperatives. Strengthening the self-sustainability of women-led cooperatives is essential to ensuring their long-term impact and resilience

4.1.3 Cooperatives Membership and Enrolment Size:

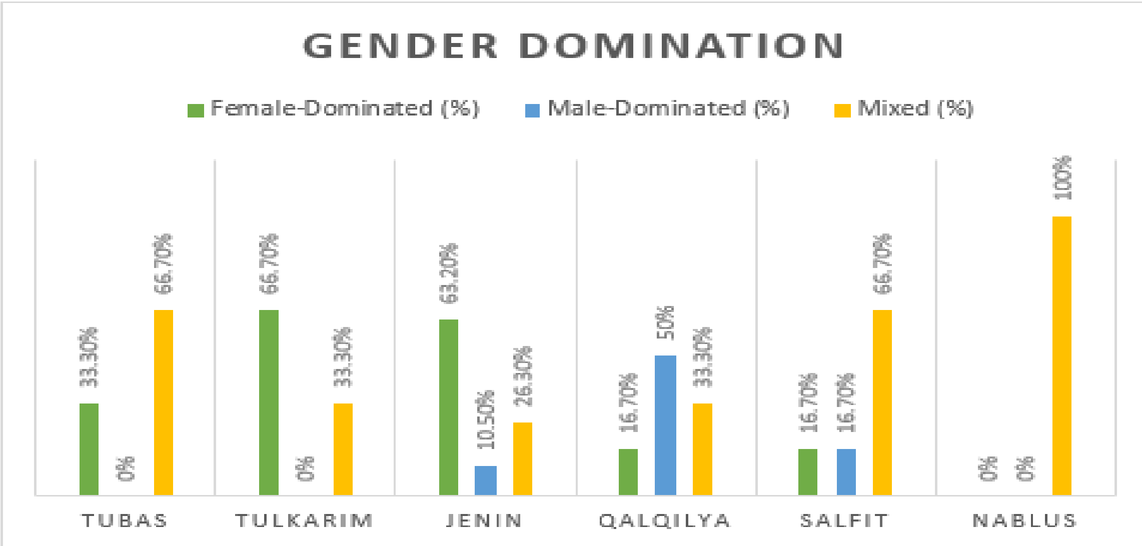
The survey data reveals an interesting distribution of gender representation within the sampled cooperatives: (i) Female-dominated cooperatives make up approximately 46.5 percent of the surveyed sample, representing nearly half of the total. (ii) Mixed cooperatives account for 39 percent, showcasing significant gender inclusivity in this segment. (iii) Male-dominated cooperatives comprise the smallest proportion, at 14.6 percent of the total sample.

Figure 7: Distribution of Gender Domination in the Surveyed Cooperatives



The chart illustrates that **female-dominated cooperatives** in the survey sample are most prevalent in the **Tulkarm governorate**, followed by significant representation in **Jenin governorate**, and then in **Tuba's governorate**. This distribution underscores the concentration of women-led initiatives in these areas, reflecting regional trends in cooperative governance and participation.

Figure 8: Gender Domination



The analysis of gender composition reveals that homogenous groups—comprising either only females or only males—are not as common as mixed groups. Among the six surveyed governorates, **8 percent** of the groups are exclusively female, while **9 percent** are exclusively male. Most groups are mixed, with a significant number featuring women in leadership roles across all governorates.

There is no clear pattern linking male- or female-dominated groups to specific commodities or processed products. However, gender equality within cooperatives remains a significant challenge. Women's active participation is often hindered by structural obstacles, many of which are rooted in sociocultural norms at both community and household levels. In most cases, men are recognized as the nominal owners of household assets by both law and custom, resulting in women having unequal access to benefits and income. This imbalance erodes women's self-confidence, limiting their ability to attain prominent positions in mixed cooperatives and market-driven agricultural ventures.
As a result of these constraints, women farmers, processors, post-harvest workers, and entrepreneurs are often confined to less profitable businesses and activities with lower potential for growth. Additionally, women's work on family-owned land—where they contribute significantly—is typically unpaid.

Membership Data:

The surveyed cooperatives across the six governorates consist of a total of **1,743 members**, averaging **43.58 members per cooperative**. Of these, **1,178 are women**, averaging **29.45 women members per cooperative**. Key findings include:

The data in the below table highlights Tulkarm as having the strongest female representation, while Jenin demonstrates its central role with the largest overall membership among cooperatives. These insights emphasize the need for targeted strategies to address the barriers faced by women and ensure equitable participation in cooperatives.

Table 24: Membership Distribution of Females by Governorate

Governorate	Total Members	Female Members	Female Representation (%)
Jenin	1,178	857	72.67%
Tulkarm	244	228	**93.44%** (Highest)
Salfit	372	180	48.39%
Qalqilya	139	74	53.24%

Tubas	73	34	46.58%
Nablus	36	24	66.67%

The enrollment sizes of cooperatives surveyed across the six governorates reveals significant variation. **Half of the cooperatives** have a membership size of fewer than 30 individuals. It is noteworthy that the formation of most groups is driven by mobilization efforts associated with various agricultural development programs. These programs typically advocate for a minimum membership size of **15 individuals**, which is the required number for cooperative registration. Consequently, no surveyed group fell below this threshold. For cooperatives that expand beyond the minimum number, their post-registration enrollment activities indicate progress toward sustainable growth. This highlights the importance of supporting cooperatives in achieving long-term viability, ensuring that their development extends beyond initial mobilization efforts.

Measures for Women and Women-Dominated Cooperatives:

To strengthen the participation, empowerment, and sustainability of women-led and women-dominated cooperatives, key stakeholders—including business development providers, international organizations, and relevant government institutions—should focus on the following interventions:

- **Expanding Opportunities for Women**: (i) Create platforms for rural women to engage in both mixed and women-only cooperatives. (ii) Group participation in agricultural value chains enhances women's self-confidence, skill development, and access to productive resources like land, capital, and entrepreneurial training. (iii) Support for Women-Only Groups:
  - Women-only groups provide a safe, supportive environment where participants share a tacit understanding of common challenges and strengths.
  - Strengthen gender equality by encouraging active participation and leadership in mixed cooperatives.
- **Facilitating Women's Leadership: (i)** Enable women to take on leadership roles in producer organizations and cooperatives, allowing them to raise their voices, influence decision-making, and ensure responsiveness to their specific needs.(ii) Empower marginalized women—particularly the young or economically disadvantaged—to contribute to cooperative governance.(iii) Market Linkages: Help women gain access to markets and diversify income streams through value addition and processing activities, such as pre-cooking vegetables. Provide training on business procedures, management, and commercialization to enhance women's market opportunities.
- **Promoting Gender Equality in Cooperatives: (i)** Ensure that both women and men have equal voices and that their opinions are valued equally within cooperative structures. (ii) Such changes can serve as catalysts for positive behavioral shifts at the household level.
- **Membership Parity:** Introduce measures such as graduated membership fees to promote gender balance within cooperatives.

4.1.4. Geographical Distribution

Based on the survey responses, "Jenin" emerges as the most frequent choice, selected **18 times**, representing **45 percent** of the total responses. Following this:

- Tulkarm was mentioned 7 times (17.5 percent).
- Qalqilya and Salfit were each noted 5 times (12.5 percent each).
- Tubas was chosen 3 times (7.5 percent).
- Nablus appeared 2 times (5 percent).

This distribution clearly indicates a strong preference for "Jenin," with it being chosen nearly three times more often than the next most frequent option, "Tulkarm." The other governorates were selected much less frequently, showcasing a marked difference in preferences

Table 25: Distribution Of Surveyed Cooperatives Across Governorates In The Northern West Bank

Governorate	Cooperative	Sample Share
Jenin	18	45 percent
Nablus	2	5 percent
Tulkarm	7	17.5 percent
Tubas	3	7.5 percent
Salfit	5	12.5 percent
Qalqilya	5	12.5 percent

The survey sample distribution statistically represents the registered agriculture cooperatives in the national data:

According to data provided by the general assemblies of cooperatives in the West Bank, there are **342 operating associations**, comprising **39,370 members**. This figure indicates that nearly half of the registered cooperatives are classified as **non-operational**. Non-operational cooperatives are those that have not fulfilled legal requirements, such as preparing budgets or holding general assembly meetings, for at least three consecutive years.

Data presented in the **National Cooperation Sector Strategy 2021–2023** highlights that the number of operational agricultural cooperatives in the West Bank is **139 associations**. However, a previous study titled *"The State of Cooperatives in the West Bank"*, conducted by the Agency in late 2017, reported **156 operational agricultural cooperatives**.

The following table provides a breakdown of operational cooperatives in the Northern Governorates based on the most recent data:

Table 26: Distribution of Regional Operational Agricultural Cooperations in the Norther Governorates

Governorates	No. of Agricultural Operational Cooperatives in the Northern Governorates	Ratio in the West Bank (139)
Jenin	22	15.8 percent
Tubas	12	8.6 percent
Tulkarem	18	12.9 percent
Nablus	12	8.6 percent
Qalqiliya	12	8.6 percent
Salfit	10	7.2 percent
Total	86	61.7 percent total agricultural cooperatives in the West Bank

Special Fragmentation and Market Challenges: The geographic isolation of certain rural communities, coupled with inadequate transportation infrastructure, is further compounded by movement restrictions such as checkpoints, the separation wall, and curfews. These barriers severely limit women's access to essential resources, business support programs, and market opportunities.

As a result, members of women-led cooperatives face significant challenges in marketing their products, building networks with other organizations, and utilizing capacity-building tools effectively. This geographic and logistical fragmentation makes it increasingly difficult to design and implement efficient market integration and economic development strategies, which are crucial for fostering growth and sustainability in these cooperatives

4.1.5 The Cooperative' Structures

The surveyed cooperatives are structured with a **board of directors**, elected by the general assembly and operating under the supervision of the relevant ministerial institution. These cooperatives focus on:

- Reducing production costs and increasing profits through collective purchasing and marketing.
- Developing economically viable initiatives to enhance members' financial well-being.
- Upholding principles of good governance and effective management.
- Representing farmers in local and international forums, as well as with government institutions.
- Advocating for and influencing government policies regarding the implementation of cooperative laws.

Despite these structured frameworks, several weaknesses were identified in the surveyed cooperatives, particularly in their organizational structures and the services they provide. These weaknesses have negatively impacted their operations, especially in cooperatives established at the request of donors or to implement aid projects. While many members display a reasonable level of motivation to work together, the majority of interviewed experts attributed poor performance to:

- Insufficient funding, vision, and resources.
- Weak leadership and ineffective business plans.

These shortcomings have led to a loss of momentum and reduced motivation for self-reliance, prompting the Ministry of Labor or the relevant authority to close many cooperatives or decline to renew their licenses. Additionally, experts noted that cooperatives are often perceived by donors as **charitable organizations** rather than as **profit-driven entities**. To address this, a shift is needed toward a **business-oriented approach** to ensure sustainability and profitability.

Successful cooperative models identified by experts share several characteristics:

- An active, paid board of directors, elected to oversee operations.
- Members contributing annual fees for the services they receive.
- Profits distributed among members, with a portion reinvested in cooperative development and investments.
- Paid staff responsible for management, production quality, and sales/marketing

4.2 Summarized Socio-Economic Characteristics of Cooperative Members

Understanding the socio-economic characteristics of women-led cooperatives involved in value chain development programs requires extensive data collection from individual groups. These data were provided by state and local government authorities responsible for oversight functions and supplemented with information from institutions working with the cooperatives. The summarized findings are as follows:

Table 27: Average Share of Female Members per surveyed Cooperatives by Governorate

Governorate	Average percent of Female Members per surveyed Coop
Tubas	46.58 percent
Tulkarm	93.44 percent
Jenin	72.67 percent
Qalqilya	53.24 percent
Salfit	48.39 percent
Nablus	66.67 percent

Key Findings:

- Age Distribution: 87 percent of cooperative members are aged 29–59 years, making this middle-age group the most active in agriculture and processing value chains. 9 percent are aged 19–28 years, while only 4 percent are over 60 years. Homogeneous youth groups remain limited in value chain activities, while most of the middle-age category relies on agriculture and processing to support their families.

- Experience in Business: More than 50 percent of members have been involved in business for over 10 years, aligning with the predominance of middle-aged participants in the cooperatives.
- Marital Status: Many cooperative members (80 percent) are married, highlighting the importance of household and food security in their engagement.
- 13 percent are single, while 7 percent are divorced or widowed.
- Household Size: The average household size in the six governorates is 5.1 individuals, slightly higher than the West Bank average of 4.6 individuals.
- Income Levels: 65 percent of members earn a monthly income below 2,000 ILS ($550).22 percent have a monthly income between 2,000–3,000 ILS ($550–800). Only 13 percent earn more than 3,000 ILS ($800), with most members' income levels close to the minimum wage (1,885 ILS/$523).
- Female-Headed Households: 12 percent of Palestinian households are headed by women.

Educational Attainment:

- 44 percent hold a high school certificate.
- 28 percent have a bachelor’s degree.
- 20 percent did not attend school.
- 5 percent hold a diploma, while 3 percent have attained higher than a bachelor’s degree.

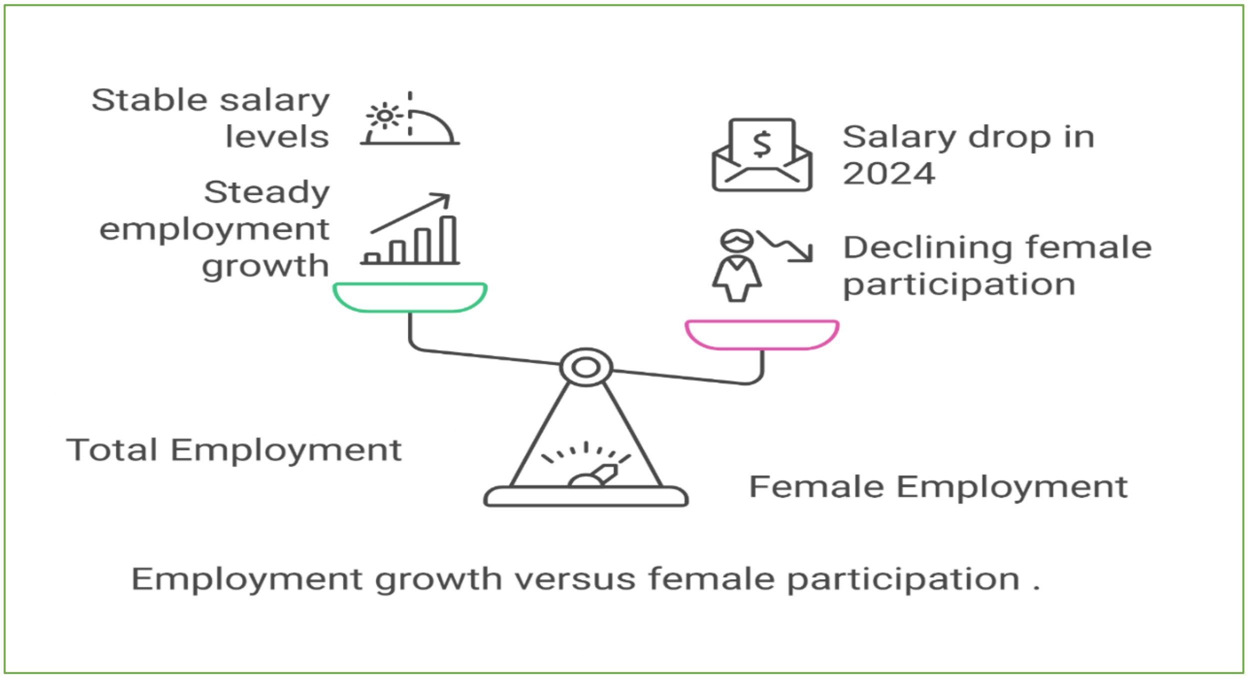
Disability Representation: **89 percent** of members reported no disabilities, while **11 percent** indicated some level of disability. These findings provide valuable insights into the socio-economic profiles of cooperative members, highlighting key areas for intervention and support to enhance their contributions to value chain development programs

4.2.1 Cooperative Average Employment

Among the surveyed groups, only **6 percent** employed staff, while the remaining **94 percent** operated strictly through member-run businesses without dedicated employees. Out of the **40 total valid responses**, **22 cooperatives and CBOs (55 percent)** provided employment data, revealing a consistent increase in employment between **2022 and 2024**. The average total employment rose from **8.18 employees** in 2022 to **10.27 employees** in 2024. However, during this period, female employment experienced a slight decline, averaging **6.09 employees** in 2024 compared to **7.32 employees** in 2022. Salaries for employed staff remained relatively stable at approximately **$412** in 2022 and 2023, but decreased to **$390** in 2024, possibly reflecting budget constraints amidst workforce expansion. It is important to note that most of these wage jobs are **seasonal and part-time** in nature. Despite these fluctuations, the cooperatives maintained a strong average **female workforce participation rate of 59 percent**, underscoring the vital role women continue to play in these organizations.

Table 28: Cooperatives Average Number of Employees (2022-2024)

Year	2022	2023	2024
Total Employment (Avg.)	8.18	8.41	10.27
Female Employment (Avg.)	7.32	7.00	6.09
Total Salary (Avg.) (USD)	411.82	412.73	390.23



Key Highlights of Socio-Economic Contributions in Cooperatives

- Female Representation: Women constitute most of the workforce in the surveyed cooperatives, making up approximately 68 percent. This reflects a high level of female participation and engagement within cooperative activities.
- Education Levels: Most respondents hold a bachelor's degree, showcasing a high level of education among workers. Additional certifications, ranging from diplomas to technical and vocational training, highlight diverse skillsets within the workforce.
- Experience: On average, workers have 8.41 years of experience, indicating strong expertise. Many employees have long-term careers, with several reporting 15–21 years of professional experience.
- Job Roles: Common positions include managers, sales officers, accountants, and administrative and field coordinators, reflecting an emphasis on operational and leadership skills within cooperative structures.

National Overview of Wage Employment in Cooperatives

At the national level, **536 individuals** are employed in wage-based roles across **114 operational cooperatives** in the West Bank, averaging **4.7 wage workers per cooperative**. Women account for **53.2 percent**54. of this workforce, underscoring their pivotal role in cooperative employment.

This summary reflects the significant contributions of women, the robust educational background of workers, and the diversity of roles within cooperatives, while highlighting the continued importance of fostering equitable opportunities and sustainable practice

4.2.2 Cooperatives Income Sources

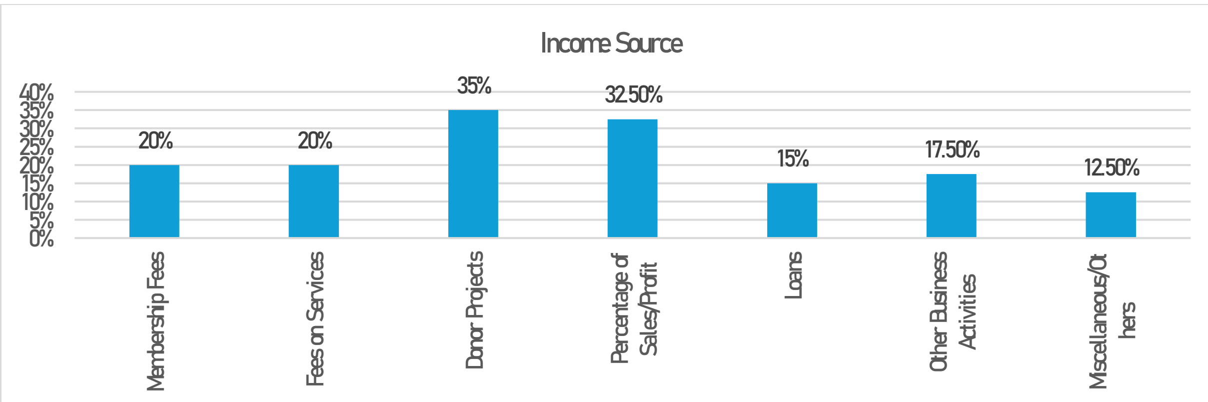
Table 29: Cooperatives Responds Source Of Income

Income Source	Frequency	Percentage (out of 40)

[54] The Cooperative Work Agency' Annual Achievement Report 2019 - Palestine,

Membership Fees	8	20 percent
Fees on Services	8	20 percent
Donor Projects	14	35 percent
Percentage of Sales/Profit	13	32.5 percent
Loans	6	15 percent
Other Business Activities	7	17.5 percent
Miscellaneous/Others	5	12.5 percent

Figure 9: Cooperatives Average Income Sources



Donor Projects as a Primary Focus for Cooperative Funding

- Mentions and Dependency: Donor projects were the most frequently mentioned source of funding, cited by 35 percent of respondents. More than a third of surveyed cooperatives have received loans or grants from local NGOs and international organizations. These funds were primarily allocated for capacity building, organizational development, and establishing revolving funds.
- Challenges: Despite this external support, the impact has often been piecemeal, as few cooperatives manage to become self-sustaining after donor funding ends. This dependency has hindered the development of sustainable structures and services, with activities often determined by external priorities instead of local needs.

Interviews revealed that the boards and general assemblies of women-led cooperatives have received training in: (i) Project management. (ii) Economic feasibility studies. (iii) Bookkeeping. (iv) Planning and fundraising. (v) Report writing, time management, and communications. (vi) Food processing
Despite this training, evidence indicates minimal impact on cooperative operations and management. Many women-led cooperatives still lack essential financial and administrative management skills, as demonstrated by the absence of:

Sales/Profit as a Significant Income Source:

- Mentions: Sales/profit income was mentioned by 32.5 percent of respondents.
- Reinvestment: Notably, a third of cooperative owners reported reinvesting their profits back into their businesses, indicating a focus on growth and sustainability.

Membership Fees and Fees on Services: Moderate Usage: Both sources were mentioned by **20 percent** of respondents, reflecting their role in generating income but highlighting room for greater adoption.

Loans and Miscellaneous Sources: Limited Utilization: Loans and miscellaneous sources were less commonly reported, with mentions at **15 percent** and **12.5 percent**, respectively.
Other Business Activities: Diversification: Additional business activities contributed **17.5 percent**, indicating some level of diversification among cooperatives.

4.3.3 Cooperative Assets (2024)

1. Total Number of Respondents: **40 cooperatives** provided detailed data on their assets, which include vehicles, machinery, equipment, buildings, land, furniture, and computers.
2. Average Asset Volume per Cooperative: **Total Asset Value**: The collective asset value across all surveyed cooperatives amounts to approximately **$2,685,240 USD**. **Average Asset Value per Cooperative**: On average, each cooperative owns assets valued at **$67,131 USD**.

3. Most Common Equipment and Tools

- Vehicles and Machinery:
  - Cars and agricultural vehicles, such as tractors, are among the most owned assets, with costs ranging from 10,000 to 100,000 NIS ($2,800–$28,000).
  - Various machines and tools complement these vehicles in operations.
- Production Facilities:
  - Food-processing tools such as mixers, dough mixers, grinders, shredders, tomato squeezers, ovens, vacuum sealers, za'atar and chili grinders, and oil presses are widely owned.
  - Some cooperatives also have their own buildings, valued up to $300,000 USD, alongside farms and chicken farms occupying spaces of up to 3,500 m².
- Furniture and Office Supplies:
  - Essential items like desks, chairs, tables, and computers are present across cooperatives, with values ranging from $300 to $6,000 USD.

4. Insights
- Substantial Asset Value: The average asset volume per cooperative is significant ($67,131 USD), reflecting investments in infrastructure and operational tools.
- Focus on Food Production and Agriculture: Assets primarily revolve around food-processing tools and agricultural equipment, highlighting the cooperatives' focus on these sectors.
- Alignment in Equipment Needs: A notable overlap exists in the types of production equipment owned, such as mixers, ovens, grinders, and vacuum sealers, indicating consistent operational needs across cooperatives.
- Commitment to Farming: The ownership of buildings and agricultural land emphasizes the cooperatives' dedication to farming and processing activities as long-term ventures.

4.3 Identifying Promising Value Chains

This research employs a participatory approach to identify promising agricultural value chains (AVCs) that integrate gender equality objectives and enhance women's economic participation in Palestine's agrifood sector. The methodology follows a structured process: **Step 1: Define Selection Criteria**: (i) Assess women's engagement across different stages of the value chain. (ii) Identify the availability of raw materials and production inputs. (iii) Analyze products currently produced by women-led cooperatives. (iv) Evaluate market demand and trade potential for local and international expansion. (v) Consider women's expertise in agricultural activities and production processes. (vi) Determine opportunities for integrating more women into key value chains. (vii) Ensure economic, environmental, and social sustainability of selected value chains. **Step 2: Conduct Data Collection & Analysis**: (i) Perform a literature review to examine previous studies and policy frameworks. (ii) Engage experts and practitioners to gather industry insights. (iii) Hold focus group discussions with women-led cooperatives to understand challenges and opportunities. (iv) Conduct cooperative surveys to collect firsthand data on production levels, financial constraints, and market accessibility. **Step 3: Evaluate Existing Value Chains**: (i) Develop a list of key agricultural value chains in the Northern West Bank Governorates (NWBGs). (ii) Discuss and assess the relevance of these value chains with experts, focus groups, and women's agricultural groups. (iii)Align findings with national agricultural priorities set by the government to validate feasibility. **Step 4: Select High-Potential Value Chains**: (i) Prioritize value chains with strong economic viability and market demand. (ii) Ensure selected value chains support gender equality and integrate women's participation. (iii) Identify promising agricultural products for cooperative-based development.

By following this **structured approach**, the research ensures that women-led cooperatives can **maximize their role in agribusiness**, enhance **market access**, and contribute to **sustainable economic growth**.

4.3.1 Gendered-based Agri-Food Value Chains

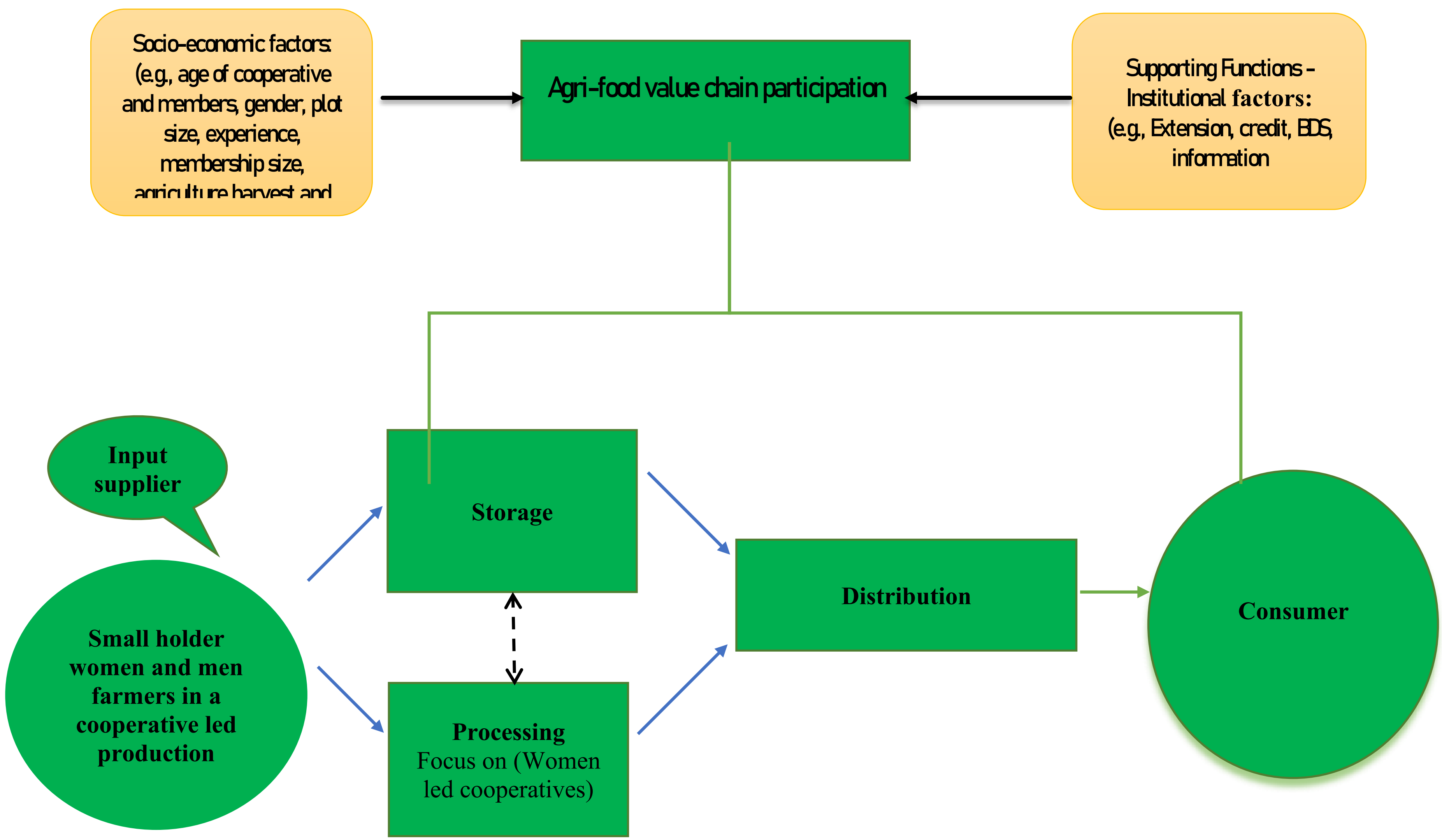
The agri-food value chain encompasses the processes involved in the flow of food from its production site (farm, enterprise, or processing cooperative) to the end consumer. This supply chain connects a network of stakeholders, including input suppliers, farmers, processors, distributors, and consumers. Women farmers and processors form a vital part of this chain, aiming to optimize profit while minimizing operational costs. However, their objectives are often hindered by the long and complex supply chain involving multiple intermediaries. These intermediaries are responsible for marketing and distributing agricultural products to final consumers, but they often impose unfair pricing, delivery delays, and lack of product control. To address these challenges, integrating women-led agricultural cooperatives into the value chain is a promising solution. These cooperatives support women farmers through input supply, storage, processing, and distribution.

Main Agri-Food Value Chain Actors:

1. Food Input Suppliers: Provide raw materials and tools needed for production. Transportation difficulties and supply chain barriers sometimes prevent easy access to inputs. Some women-led cooperatives act as raw material suppliers.
2. Producers: Include traditional food producers and women-led cooperatives. Production often occurs at home or in small shops. Producers lack formal training in marketing and business skills, relying on traditional household tools and techniques.
3. Middlemen: Handle distribution of agricultural products as raw materials and final goods. Farmers and processors face high production costs, often receiving unfair pricing from middlemen. Middlemen capture most profits by purchasing at low prices and reselling at high prices, discouraging new investors in agriculture.
4. Wholesalers: Brokers buy products from producers and pass them to retailers. Wholesalers primarily serve local markets in the targeted governorates.

5. Retailers: Include local shops, supermarkets, restaurants, and markets. Producers sell directly to consumers or retailers, enhancing access within the community.
6. Vocational Training Centers: Play a significant role in enhancing skills related to modern production techniques, business management, and marketing. Centers are available across governorates to improve workforce competence.
7. Business Development Services (BDS): Strengthen the food value chain by supporting cooperatives and SMEs. Focus on areas such as administration, finance, marketing, innovation, and public relations.
8. Microfinance Institutions (MFIs) and Banks: Offer limited financial support to cooperatives and MSMEs due to risk aversion and greater loan requirements. Interest rates charged by banks range between 11–14 percent, while MFIs often charge rates above 18 percent, making financing challenging for cooperatives.
9. Government Organizations: Provide essential support for policy implementation, taxation, export procedures, health and safety compliance, and public procurement.

Conceptual Framework of the Agri-Food Value Chain:


Socio-economic factors:
(e.g., age of cooperative
and members, gender, plot
size, experience,
membership size,
agriculture harvest and
Agri-food value chain participation
Supporting Functions -
Institutional factors:
(e.g., Extension, credit, BDS,
information
Input
supplier
Small holder
women and men
farmers in a
cooperative led
production
Storage
Processing
Focus on (Women
led cooperatives)
Distribution
Consumer

4.3.2 Main Stages in the Value Chain

Stage A-Inputs and Supplies: Agri-Business

Raw materials for food processing are sourced from various channels, including those produced directly by women entrepreneurs and their families, as well as those available locally in rural, often marginalized, areas in the northern regions. The local community and neighboring areas are frequently the primary consumers of these products, particularly in cases of small-scale manufacturing by women-led cooperatives and their members.

Examples of raw materials include:

- Locally Sourced Ingredients: Ingredients like oregano, thyme, roasted sesame, sumac, olive oil, and salt used in the production of Za'atar are partially sourced from local areas. Olive oil, an essential ingredient, is also widely available locally.
- Imported Inputs: Some components, such as sesame and sumac, are imported. The same applies to materials for other processed foods like cucumber pickles, dates Ajwa, tomato paste, eggplants, Makdous, almonds, and grapes.

In addition:

Staples for Food Production: (i) Wheat serves as the base for making flour, *Maftoul*, *Freekeh*, bran, and semolina. (ii) Grapes are utilized in producing grape molasses, grape jam, *malban*, raisins, and grape vinegar.

Many women-led cooperatives, along with their members, grow a portion of the agricultural products required for processing by harvesting small land lots or home gardens. While the input supply chain for women-led cooperatives is predominantly local, certain ingredients for processing are only available in limited quantities and are purchased externally.

Connection Between Agriculture and Food Sector Development:

The growth of the food sector is closely tied to the agricultural sector, as it provides the primary source of raw materials for food processing. Moreover, the industry relies heavily on complementary sectors, such as:

- Packaging (paper, plastic, and glass).
- Transport and communication networks for distribution and logistics.

Information and Access to Raw Materials

Insights into how cooperatives access information and materials include:

- About 33 percent of respondents obtain market information from suppliers.
- About 8 percent rely on competitors for insights, demonstrating collaboration and mutual benefits among actors.
- About 46 percent gather information through personal visits to the market, personal relationships, friends, and client interactions.

This ecosystem highlights the cooperative nature of these networks and the importance of integrating both localized and external inputs for sustainability and growth.

Stage B- Production and Processing- Key Products Currently Produced by the Surveyed Cooperatives

Process and Equipment: Women play a pivotal role in post-harvest activities, especially in the processing of Za'atar. Tasks include cleaning, bundling, drying, stripping leaves from stalks, grinding, and mixing. These activities are typically conducted at the household level, involving family members, or at cooperative facilities. Farmers, including women, often dry thyme not only to meet market demands or fulfill trader orders but also as a quick preservation method to extend the product's shelf life. This helps them maintain their produce during price fluctuations and secure fair prices. However, many farmers employ improper drying practices, such as exposing fresh thyme to direct sunlight. This method:

- Negatively affects the herb’s aromatic qualities.
- Reduces the concentration of its active ingredient, thymol.
- Increases the risk of contamination from birds, animals, insects, and microbes.
- Ultimately impacts the taste and quality of the final product.

Processing in the surveyed cooperatives is primarily manual, with some using semi-automatic equipment. This contrasts with medium- and large-scale processing companies, which often utilize fully automated processes for the same products.

Processing and Value Addition Activities:

The surveyed cooperatives demonstrate a deliberate focus on value addition to the commodities they produce. Across the six governorates, many cooperatives have acquired processing machines, either through development programs or self-funding. These cooperatives are classified as processing cooperatives because they were formed or organized specifically around processing activities. Their value addition efforts include not only transforming raw materials into finished products but also enhancing marketing efforts through:

- Packaging innovations to make products more appealing.
- Promotions and branding to improve visibility and attract customers.
- Direct sales to reduce dependency on middlemen and secure better profits.
- This dual approach of processing and marketing reflects their commitment to maximizing product value and creating sustainable business models.

Processing and Value Addition Activities of the Surveyed Cooperatives:

The processing activities undertaken by the surveyed cooperatives are deliberate strategies aimed at adding value to the commodities they produce. Across the six governorates, several cooperatives have acquired processing machinery either through support from development programs or through self-funding efforts. These cooperatives are categorized as *processing cooperatives*, as they were specifically formed or organized around processing activities. The scope of their processing activities is assessed based on the level of value addition. Most cooperatives engaged in value addition go a step further by enhancing the marketing of their products through various initiatives such as:

- Innovative packaging to improve product appeal.
- Promotional campaigns to increase visibility and customer engagement.
- Direct sales strategies, which reduce reliance on middlemen and allow cooperatives to retain a larger share of profits.
- These efforts underline the cooperatives' commitment to maximizing product value and fostering sustainable growth in their businesses.

Ranking of Most Produced Products by the Surveyed Cooperatives:

The survey responses identified a diverse range of products, including Za’atar, dried herbs, pickles, olive oil, fresh herbs, Freekeh, dairy products, and Maftoul. Below is a ranked list of the most produced products based on production volumes, along with key insights:

Za’atar is produced in various forms, including dried herbs, blended spice mixes, and pure dried thyme. Its cultivation has maintained consistently high production volumes over multiple years. Increasing engagement from SMEs, cooperatives, and women’s groups has strengthened thyme farming and processing. leading marketing companies, such as Thimar, Rozana, and Bas Baladi, have successfully tapped into local markets, providing dedicated selling points for traditional crafted thyme products by women. Beyond its commercial appeal, thyme cultivation serves as a critical income source and dietary enhancement, particularly for women who head households or belong to economically vulnerable communities. As a resilient crop, thyme thrives in drought-prone regions and poor soil conditions, making it an ideal choice for home gardening.

Makdous is a traditional breakfast delicacy made from eggplants stuffed with roasted red peppers, walnuts, and seasonings, then preserved in olive oil. It remains a staple in many households and is widely produced by cooperatives specializing in traditional food processing.

Pickles (all types): this category encompasses cucumber pickles, mixed vegetable salads, and specialty fresh- pickled items, including snake cucumber. Pickles are produced in large quantities, primarily catering to bulk markets.

Dairy Products: dairy cooperatives maintain moderate yet steady production of staple dairy items such as Labneh, yogurt and cheese. The products continue to hold cultural and nutritional importance across local markets.

Honey remains a key product within the natural and traditional food sector, demonstrating consistent consumers demand and stable production levels.

Dried Herbs: this category includes green Za'atar, chamomile, and various widely cultivated herbs. High Production volumes ensure continued availability for domestic markets. Olive oil, a cornerstone of local and export markets, olive oil production is highly prioritized, often packaged in bulk quantities for widespread distribution.

Tomato Paste: regions like Qalqilya lead in tomato paste production, ensuring steady supply and consumer demand for this kitchen staple.

Freekeh: as a nutritious, traditional grain, Freekeh enjoys consistent production, reinforcing its cultural significance as a dietary staple.

Maftoul, a Palestinian couscous made of hand-rolled wheat, is typically served with stews featuring chicken or lamb. Annual production remains strong, securing its place as a beloved traditional dish.

Chili production has shown remarkable consistency, contributing to the diverse product portfolios of cooperatives engaged in traditional food processing.

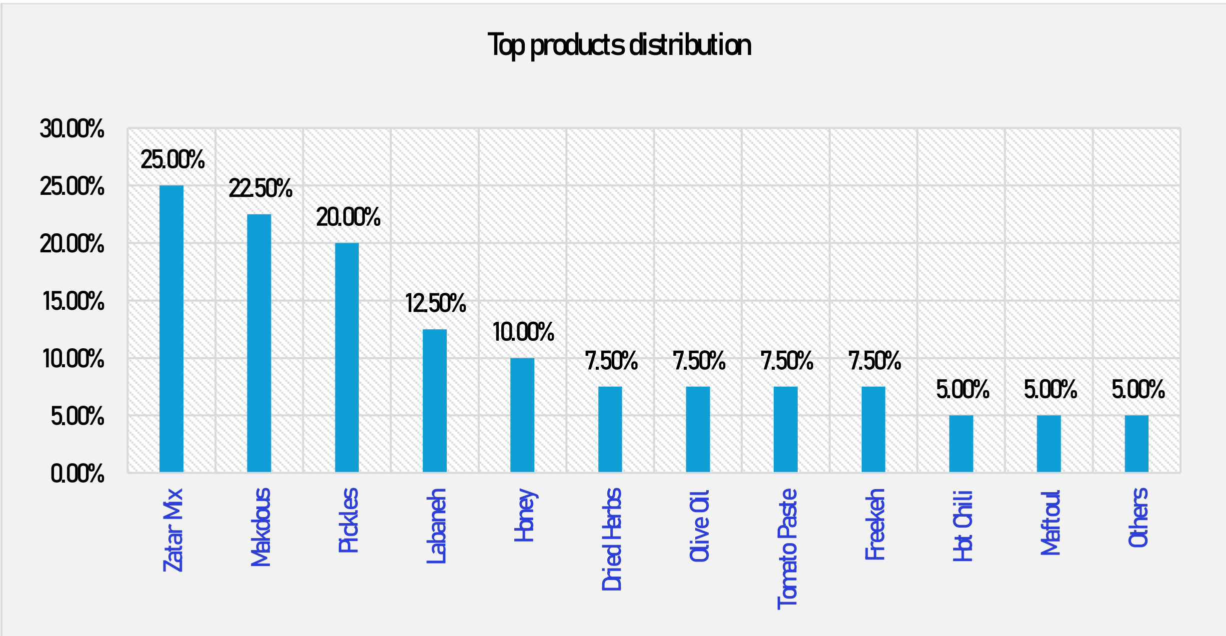
This ranking demonstrates the cooperatives' focus on both traditional and widely consumed products (Za'atar, Makdous, and Pickles as key products), with significant emphasis on cultural relevance, market demand, and production consistency

Table 30: All Surveyed Cooperatives' Products Cross all the six Governorates

Product	Frequency(Cooperatives)	Percentage (percent)
Zatar Mix	10	25.00 percent
Makdous	9	22.50 percent
Pickles	8	20.00 percent
Labneh	5	12.50 percent
Honey	4	10.00 percent
Dried Herbs	3	7.50 percent
Olive Oil	3	7.50 percent
Tomato Paste	3	7.50 percent

Freekeh	3	7.50 percent
Hot Chili	2	5.00 percent
Maftoul	2	5.00 percent
Others	2	5.00 percent

Figure 10 *Top Products Distribution*



Eco-Tourism Initiatives in Rural Communities
Aqraba: Aqraba Women Center
As part of the Aqraba municipality, the Aqraba Women Center focuses on key activities, including:

- Organizing **awareness workshops**.
- Creating **job opportunities** for local women.
- Sponsoring **summer camps** for community engagement.

The village of Aqraba lies in the picturesque rural outskirts of Nablus, surrounded by small farming enterprises nestled in the lush countryside. Visitors are welcomed by Sharifa Nassar, who showcases an array of savory food products. The ingredients for items such as stuffed olives, pickles of stuffed peppers, and labneh (yogurt preserved in olive oil) come directly from her own garden. Fresh bread, paired with olive oil and locally produced za'atar, is baked in the village's ***taboon*** *(community oven), providing an authentic culinary experience.*
In the gathering room, women proudly display their handcrafted items. Fatma Al Ra'e, a trained fashion designer, exhibits children's clothing she has designed and knitted. Her creations allow her to work from home, care for her children, and contribute to the Women Center's activities. Another member offers visitors handmade olive oil soap, reflecting the center's focus on fostering local craftsmanship and skills development.

Burqin: The Ladies Center Society
Located in the village of Burqin near Jenin, The Ladies Center Society operates out of the rehabilitated Jarrar Palace, a historic building whose beautiful stonework and tiles have been meticulously restored with support from the local municipality. The center features a large meeting room where women serve

traditional meals to tourist groups and host local festivals, while also preparing meals for school programs. Adjacent to the meeting room is the kitchen, where Omaima Khlouf, the Society's contact person, demonstrates the preparation of za'atar (duqqa) with the help of other members. This za'atar blend includes locally raised thyme, sumac, cumin, toasted sesame seeds, olive oil, and salt—ingredients either cultivated by the women or sourced from nearby farmers. Both initiatives showcase how rural communities are blending eco-tourism with local traditions, empowering women through sustainable livelihoods and cultural preservation

Products Packaging, Volume Trends, and Price Stability

- Single Packaging Dominates: Many products, particularly dried herbs, pickles, and Za'atar, are predominantly packaged in single units, reflecting consumer preference for convenience and individual portion sizes.
- Price Stability: Prices across most product categories have remained stable from 2023 to 2024, indicating consistency in the market and minimal price fluctuations during this period.
- Volume Growth: Production volumes have shown a notable increase in 2024, highlighting either growing consumer demand or expanded production capabilities by cooperatives and producers.

Table 31*: Products Packaging, Volume Trends and Products Price Stability*

Product	Packaging Details	Volume Trends	Price Stability
Mixed Za'atar	50 percent single-packed; 50 percent bulk packaging	2023: 1–2 tons 2024: Increased to 2.5 tons	Stable at $4.42/kg
Makdous	80–100 percent single-packed; 10–20 percent bulk packaging	2023: 3.99 tons 2024: Increased to 5.95 tons	$10.89/kg (2023), $11.00/kg (2024)
Pickles	Bulk packaging dominates (100 percent)	2023: 2–3 tons 2024: Increased to 3.5 tons	Stable at $3.5/kg
Dairy Products (Labneh)	Mostly plastic jars; single-packed for smaller volumes	2023: 0.4–0.5 tons 2024: Slight increase to 0.6 tons	Stable at $7.29/kg
Honey	Fully single-packed, targeting retail customers	2023: 2.4 tons 2024: Declined to 2.2 tons	Stable at $27/kg
Dried Herbs	Fully bulk packaging (100 percent)	2023: 1 ton 2024: Increased to 1.5 tons	$3.5/kg (2023), rose to $4.0/kg (2024)
Olive Oil	70 percent bulk packaging; 30 percent single-packed	Consistent at 1 ton/year	Stable at $6.64/kg
Tomato Paste	Fully single-packed, consumer-ready	2023: 0.87 tons 2024: Increased to 1.07 tons	Stable at $10.67/kg
Freekeh	Fully single-packed (100 percent)	2023: 0.8 tons 2024: Expanded to 1.3 tons	Stable at $3/kg
Maftoul	Fully single-packed (100 percent)	Consistent at 3 tons annually	Stable at $3/kg
Hot Chili	96 percent single-packed; 4 percent bulk packaging	2023: 0.7 tons 2024: Slight increase to 1 ton	Stable at $2.5/kg
Fresh and Pickled Vegetables	100 percent single-packed, including Faqouss and grape leaves	2023: 1.5–2 tons 2024: Steady at 2.5 tons	Stable at $11/kg

This table provides a comprehensive breakdown of the data, highlighting packaging preferences, production trends, and price stability across various product categories.

Table 32*: Identify Top Products By Governorate*

Governorate	Top Products	Key Insights
Tubas	Dried Herbs (66.67 percent): Includes *Za'atar*, chamomile, turmeric, ginger. Fresh Herbs & Labneh & Cheese (33.33 percent each).	Focus on herbal and dairy products, emphasizing traditional and locally sourced items.
Tulkarm	Honey (75.00 percent). Makdous (50.00 percent). Pastries (25.00 percent). Freekeh.	Dominates in sweet, high-value products; showcases diversity with preserved foods and grains.
Jenin	Zatar Mix (33.33 percent). Pickles & Labneh (20.00 percent each). Honey, Makdous, Freekeh, and Grape Leaves.	Highlights a diverse portfolio of preserved and dairy products; strong local traditions in *Za'atar*.
Qalqilya	Tomato Paste & Pickles (40.00 percent each). Olive Oil & Others (20.00 percent): Frozen vegetables, *Kharoub molasses*.	Balanced production profile; focus on preserved and processed goods for local markets.
Salfit	Zatar Mix & Pickles (50.00 percent each). Makdous & Freekeh (33.33 percent each). Olive Oil (16.67 percent).	Diverse production ranging from preserved foods to grains and oils; emphasis on traditional staples.
Nablus	Zatar Mix (100.00 percent). Olive Oil (50.00 percent).	Strong specialization in *Za'atar* as the top product, alongside high-value traditional olive oil.

This table provides a clear overview of product trends and governorate specializations.

Table 33: Product Value chain-Nodes in the Value Chain, and Proposed interventions

Governorate	Product Categories	Focus Products (With Percentages)	Proposed Interventions
Tubas	Dried Herbs, Fresh Herbs, Dairy	Dried Herbs (66.67 percent): Za'atar, chamomile, turmeric, ginger. Fresh Herbs and Dairy (33.33 percent): Labneh, cheese.	- Capacity building in marketing and market linkages. - Development of labeling and branding. - Advanced za'atar production technology. - Cold storage for dairy.
Tulkarm	Honey, Preserved Foods, Mixed Za'atar, Pastries	Honey (75 percent), Makdous (50 percent), Mixed Za'atar (Various), Pastries (25 percent), other products such as Freekeh, hot chili.	- Access to finance and updated technologies. - Brand and label development. - Infrastructure rehabilitation. - Product testing for quality assurance.
Jenin	Zatar Mix, Pickles, Labneh, Specialty Items	Zatar Mix (33.33 percent), Pickles, Labneh (20 percent), Honey, Makdous, Freekeh, Grape Leaves (Smaller Share).	- Adoption of advanced technologies. - Marketing capacity building. - Export readiness training, certifications, infrastructure. - Production efficiency training.
Qalqilya	Tomato Paste, Pickles, Olive Oil	Tomato Paste and Pickles (40 percent), Olive Oil, Frozen Vegetables, Kharoub Molasses (20 percent).	- Capacity building for marketing. - Greenhouse rehabilitation. - Supply chain optimization and management.
Salfit	Zatar Mix, Pickles, Grains, Oils	Zatar Mix and Pickles (50 percent), Makdous, Freekeh (33.33 percent), Olive Oil (16.67 percent).	- Construction of wells and fencing. - Supply chain optimization. - Training in digital marketing and e-commerce. - Logistics support and renewable energy use.

Nablus	Zatar Mix, Olive Oil	Zatar Mix (100 percent), Olive Oil (50 percent).	- Finance access improvement. - Marketing capacity building. - Packaging and labeling development for external markets. - Brand development support.

A comprehensive gender-specific analysis of agricultural value chains is essential to identify opportunities for women's empowerment, address barriers, and enhance their participation across nodes. Below is a refined summary of the key findings and strategies:

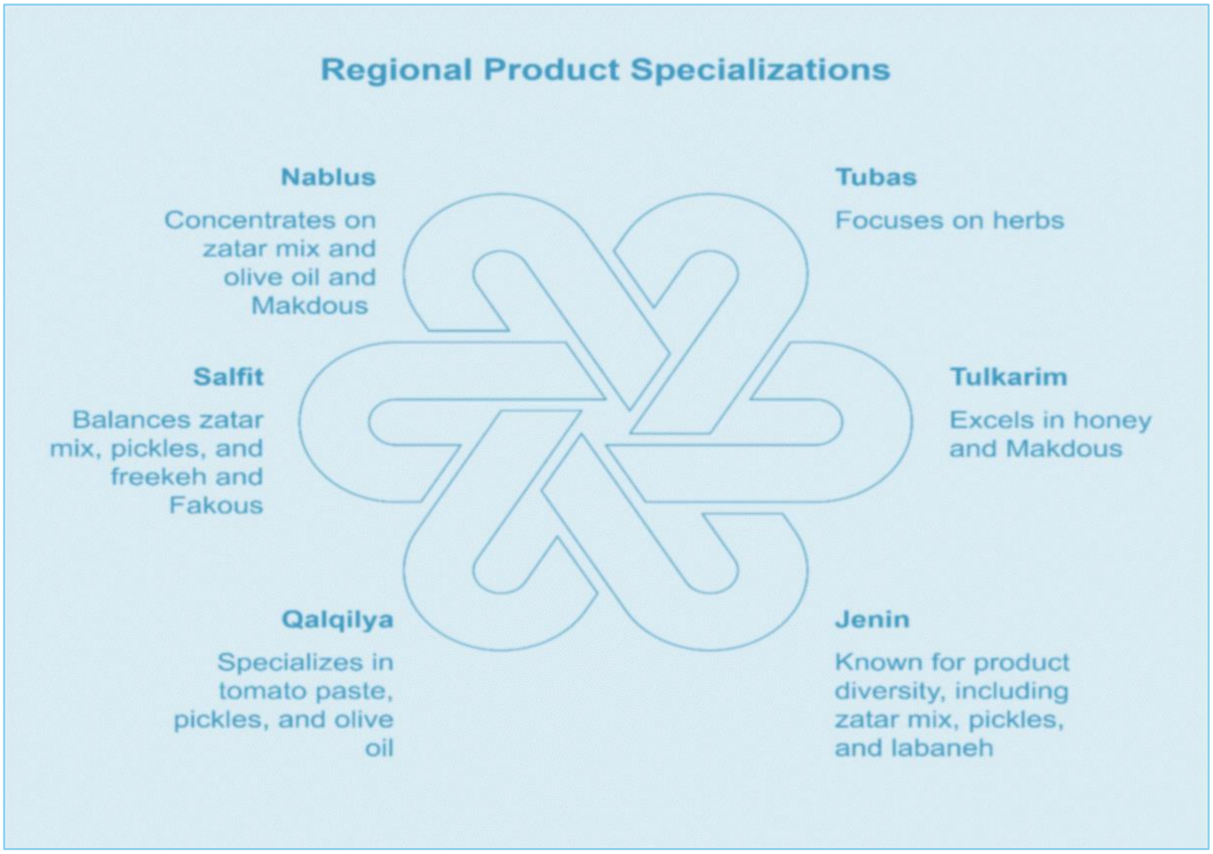
Discussion Points:

Dominance of Zatar Mix: *Zatar Mix* stands out as the most frequently mentioned product overall, dominating production in **Jenin**, **Salfit**, and **Nablus**. Its widespread importance highlights its cultural and market significance in these regions.

Regional Specialization: **Tubas**: Recognized for its herbal products, including *Za'atar*, chamomile, turmeric, and ginger, along with dairy products like *Labneh* and cheese. **Tulkarm**: Specializes in *Honey* and *Makdous*. Additionally,

- the **Baqa Al-Sharqieh** Cooperative in Tulkarm is known for producing spicy homemade Chili Sauce (Shatta), made from locally harvested red chili peppers, spiced with garlic and salt. This chili sauce holds certifications for Fairtrade, Halal, and PSI, ensuring its quality and compliance with international standards. Qalqilya: Focuses on preserved and processed goods, with Tomato Paste and Pickles leading production, followed by a secondary emphasis on Olive Oil.
- Salfit: Balances a variety of products, including Zatar Mix, Pickles, Makdous, Freekeh, and chili sauce, showcasing a well-rounded portfolio.
- Nablus: Excels in *Zatar Mix* and *Olive Oil*, emphasizing high-value traditional goods and spices.

Figure 11: Regional Products Specializations



Stage C- Storage

Small processors, including women-led cooperatives, typically store their processed products in greenhouses or small storage facilities while waiting for buyers. However, these storage methods are often inadequate, as they degrade the product's quality—negatively affecting its aroma, taste, and overall characteristics. Cold storage is rarely utilized, except for the occasional use of refrigerators, particularly for dairy products.

Ensuring an Effective Post-Harvest System: This analysis highlights the critical need to prioritize storage, processing, and marketing of food products. Key action areas include:

Government Awareness:

- Emphasizing the importance of the post-harvest sector for household food security and improved nutrition in both rural and urban settings.
- Infrastructure Development:
- Establishing appropriate and well-maintained infrastructure, such as markets, road networks, and extension services, to support farmers in:
- Improved storage techniques.
- Bulking their produce as a group to reduce marketing costs.

Collaborative Interventions:

- NGOs, government agencies, and private sector entities need to work together to establish marketing information systems and provide training in:
- Marketing management.
- Accounting and business practices.

Support for Women:

Stakeholders can enhance women's involvement in food processing and marketing by offering:

- Training on appropriate processing technology.
- Extension supports to market fresh and processed products effectively.

Stage D- Market Insights: Market Channels and Product Distribution

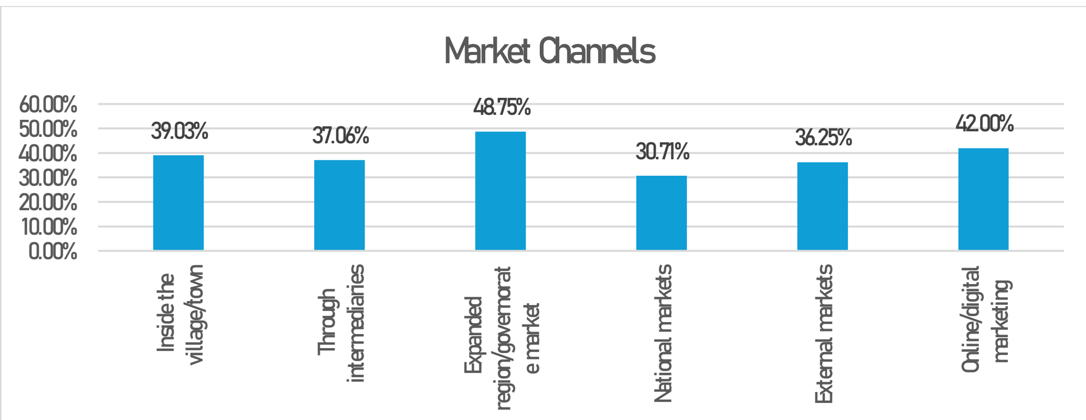
The food industry in Palestine accounts for:

- 24 percent of the value of production.
- 22 percent of total exports.
- 22.2 percent of manufacturing industry production.

Women-led food industries hold a distinctive market share, catering to both local and external consumption. Distribution channels include:

- Direct sales to village consumers.
- Sales to intermediaries/traders within the governorate market.
- National markets.
- External markets for export.
- Online platforms offering digital reach and access

Figure 12: Cooperatives Market Channels



Marketing Insights by Channel and Governorate:

Based on the data provided, here are the marketing insights keeping in mind the current security situation in most of these governorates:

Table 34: Market Distribution Channel by Governorate

Channel	Governorates	Key Insights
Inside the Village/Town	Tulkarm, Jenin, Salfit (100 percent) Tubas (50–60 percent) Qalqilya (10–90 percent)	Heavy reliance on local markets, particularly in Tulkarm, Jenin, and Salfit. Tubas and Qalqilya show moderate to varied levels of engagement in village-level sales.
Through Intermediaries	Jenin (up to 90 percent) Qalqilya (up to 40 percent) Tubas (30–50 percent) Tulkarm, Salfit (10–30 percent)	Common in Jenin, Qalqilya, and Tubas, while minimal reliance is observed in Tulkarm and Salfit.
Expanded Regional/Governorate Markets	Qalqilya (50 percent) Tulkarm (30–70 percent) Jenin (30–80 percent)	Active participation in regional markets, with Qalqilya and Jenin showing strong engagement, followed by Tulkarm.

National Markets	Qalqilya (30–80 percent) Jenin (10–30 percent) Tulkarm, Salfit (minimal activity)	Qalqilya leads in accessing national markets, with moderate contributions from Jenin. Tulkarm and Salfit remain less active at this level.
External Markets	Salfit (80 percent) Qalqilya (40 percent) Tubas (50 percent) Jenin, Nablus (lower levels)	Significant export activity in Salfit, Qalqilya, and Tubas. Jenin and Nablus show limited participation in external markets.
Online/Digital Marketing	Tubas (50 percent) Salfit (40 percent) Jenin (20–40 percent)	Limited use of digital platforms, with Tubas and Salfit leading. There is potential for growth in online marketing across all governorates.

This table highlights the distribution and engagement of each governorate across different marketing channels.

Key Takeaways

Local Market Focus: Several governorates, such as **Tulkarm**, **Salfit**, and **Jenin**, heavily rely on local and regional markets for sales, indicating a strong dependence on immediate surroundings for revenue.
Export Potential: **Salfit** and **Qalqilya** have established significant footholds in external markets.
Challenges to exporting include difficulties in meeting the **quality standards** required by foreign importers. Producers, particularly **women**, face barriers in accessing resources and keeping up with modern production, quality, and marketing requirements.
Export capacities are often addressed on an **ad hoc** basis, highlighting the need for embedding quality standards as part of regular business processes.

Online Marketing Lag: While **Tubas** and **Jenin** show limited activity in digital marketing, most governorates underutilize this channel. This presents a strategic opportunity to expand market reach through **online platforms**.

Intermediary Dependency: Moderate reliance on intermediaries is observed, especially in **Jenin** and **Qalqilya**. Optimizing direct-to-market strategies could enhance margins and improve revenue.

Successful Case: Marketing

Mawasem is a unique brand established by New Farm Company (Ramallah, Palestine) to support Palestinian farmers through the distribution of premium-quality agricultural goods on the market. Under Mawasem brand a range of 15 delicious products manufactured in local cooperatives, according to highest quality standards. They ensure our customers that each sold product is a contribution towards the sustainable development of Palestinian cooperatives, in which the main driving force is women.

Mawasem is a group of small food producers located in Palestine who managed to create an effective business model. The idea behind Mawasem is to support local farmers and Palestinian economy. There are ten cooperatives and each of them produces a unique traditional food product, under the Mawasem brand.

Among them, there is Al-Aqrabanieh which is an example of a fast-developing women cooperative. The cooperative stands out by the production of organic thyme. They worked hard to obtain Bio-UE and Fairtrade certificate.

Mawasem products have successfully entered international markets, and we have exported them to many countries in different regions all over the world, including Europe, Northern America, Eastern Asia, Arabian Gulf and many more.

Main Products: Olive Oil

Our olives are hand-picked from the olive trees. The olive trees belonging to the farmers from the Palestinian agricultural cooperatives are carefully harvested and then pressed. The natural olive oil *comes from the fields of Palestine, which are deeply rooted in human civilization. The geographical value gives the olive oil special taste. Furthermore, our olive boasts three important certificates – Fairtrade, Organic/Bio-EU and Halal.*

Available types: Organic Olive oil, Extra Virgin Olive oil Virgin Olive oil

Produced by
Yassouf Cooperative

Pickled Olives

Olives are pickled according to the traditional Palestinian recipe. After the addition of salt, lemon and green chili pepper, olives are put into firmly closed jars. Pickled olives are considered as one of the main appetizers in Palestinian households. Olive fruits are selected and picked carefully by hands to guarantee the best taste and quality of food.

Olive Paste

Olive paste (tapenade) is a smooth paste made from the blessed olive trees that has grown in the fertile groves of Palestine from the past thousands of years. They offer tasty olive paste, both green and black. Palestinian women select the finest fruits to produce the olive paste, which is perfect to use it when preparing the pastries and sandwiches.

Produced by
Mardah Cooperative

Certificates

Participating Cooperatives: Al-Jalameh, Al-Aqrabanieh, Al-Jeftlek, Anabta, Baqa Al-Sharqieh, Bardalah, Beit Al-Karameh, Beit Fourik, Jenin, Mardah, Silwad, and Yassouf

Online Marketing Lag: While Tubas and Jenin show some digital marketing activity, most governorates underutilize this channel, suggesting an area for strategic investment.

Intermediary Dependency: There is a moderate reliance on intermediaries, especially in Jenin and Qalqilya, which could be optimized for better margins and direct market access.

Stage E- Distribution

Transporting fresh produce and processed foods remains a major challenge across all stages of the agricultural value chain. Over the past two years, logistical issues have worsened due to:

- Travel restrictions, curfews, and delays stemming from direct conflicts in the Northern Governorates.
- Rising costs, leading to reduced trading volumes.

Limited freedom of movement, which results in:

- Farmers and processors struggling to deliver their products to buyers.
- Buyers unable to access farmers and processors.

These factors have collectively impacted the agricultural sector's ability to maintain steady trade flows. While distribution channels have been detailed in earlier sections, this analysis highlights the urgency of addressing transport inefficiencies and mobility restrictions.

Stage F- Marketing

Survey results unanimously identified marketing as the most significant challenge faced by women-led cooperatives in the food sector. This issue encompasses two key aspects:

- Promotion of products to end users or resellers.
- Adherence to local and international product standards for market entry.

Additional Barriers

- Financial limitations: Women-led businesses often struggle to secure the resources needed for product development and marketing initiatives.
- Social pressures and inequalities: Cultural and systemic barriers further hinder women's ability to conduct business effectively.

Marketing Methods (Chart Overview)

Although cooperatives face numerous obstacles, respondents reported using various marketing methods. Unfortunately, I cannot visualize the chart directly in this chat, but I can help describe or suggest ways to effectively present the data for greater clarity, such as a bar graph or pie chart based on the percentage breakdown

Figure 13: Marketing

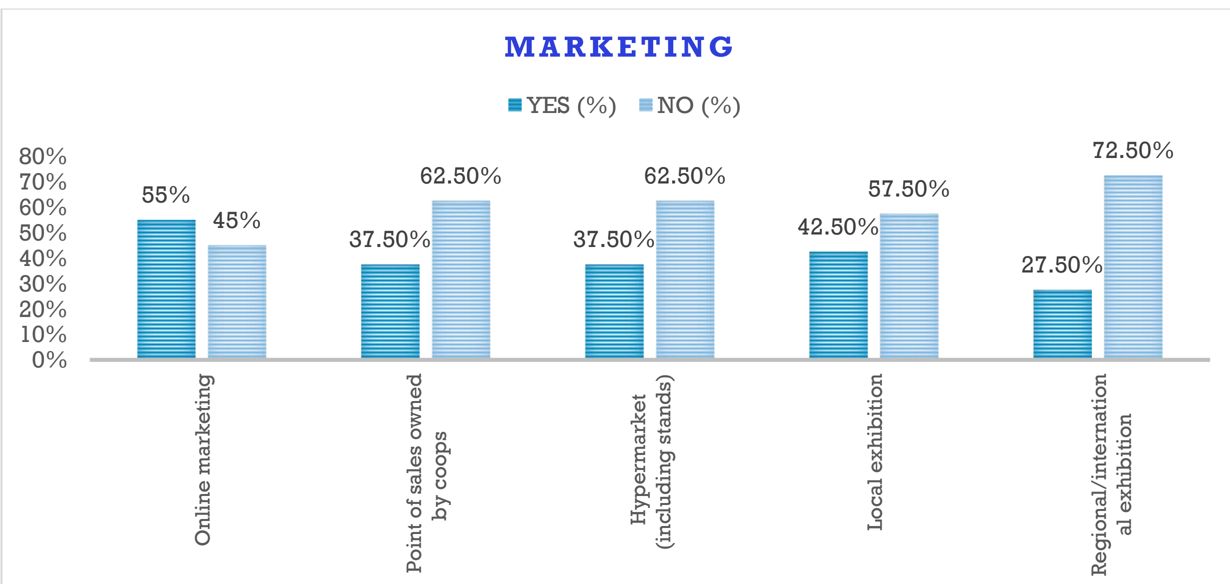


Table 35: Marketing Channels

Category	Region/Insights	Key Takeaways
1. Online Marketing	- **Active Usage**: Jenin, Qalqilya, Tulkarm, Nablus, and occasionally Tubas; Salfit also demonstrates some activity. - **Avoidance**: Certain areas in Tulkarm, Tubas, and Salfit avoid online marketing.	- Online marketing is underutilized in many governorates, presenting a significant opportunity for growth.

2. Points of Sale Owned by Coops/CBOs	- **Effective Use**: Jenin, Tulkarm, and Salfit. - **Underdeveloped**: Tubas and parts of Qalqilya.	Expanding the ownership and usage of points of sale can enhance cooperatives' market presence.
3. Hypermarkets/Marketing Company Points of Sale	- High Engagement: Primarily concentrated in Qalqilya, with occasional use in Jenin. - Low Engagement: Tubas, Tulkarm, and Salfit.	Increasing cooperative presence in hypermarkets can improve market access for urban consumers.
4. Local Exhibitions	- High Participation: Jenin, Qalqilya, and Tulkarm. - Limited Participation: Tubas and Salfit.	Local exhibitions are vital for connecting with nearby consumers and should be better utilized in weaker areas.
5. Regional and International Exhibitions	- Active Participants: Jenin, Nablus, and Salfit. - Low Participation: Tubas, Tulkarm, and parts of Qalqilya.	-Greater engagement in regional and international exhibitions can help cooperatives scale their operations and access larger markets.
6. General Marketing Challenges	- Lack of market information, storage space, and transportation limits market expansion for both male and female farmers. - Women face additional barriers, including limited resources and societal pressures.	Feminist organizations, incubators, and community initiatives can promote women's products and organize permanent marketing spaces and exhibitions.
7. Promising Sectors	- Traditional women's handicrafts such as Maftoul, Sheeshbark, and Makdous are featured in restaurants and supermarkets.	This sector holds promise for women's entrepreneurship, especially in rural areas, due to easy access and cultural significance.

This table efficiently captures the insights and key takeaways for each category.

Overall Discussion:

1. Jenin as a Leader: Jenin emerges as the most diverse and active governorate across all marketing channels, demonstrating strong and varied marketing strategies.
2. Potential Growth Areas: Tubas, Salfit, and specific areas in Tulkarm and Qalqilya show underperformance in key channels such as online marketing, hypermarkets, and exhibitions, highlighting areas for strategic improvement.
3. Local Over National: Participation in local exhibitions is somewhat utilized. However, engagement in regional and international exhibitions remains significantly underdeveloped across most governorates, limiting opportunities for market expansion.
4. Digital Marketing Gap: Despite its potential to reduce intermediary reliance and expand consumer reach, online marketing remains underutilized. Regions like Tubas and Jenin show minimal activity, reflecting significant room for growth in digital engagement.
5. Obstacles for Smallholder Farmers: Both male and female farmers face numerous challenges, including:

Lack of market information.

Limited storage space and transportation, restricting expansion into new markets.

Men emphasize competition concerns, while women face higher barriers due to resource inequalities.

6. Support for Women Producers: **Feminist organizations**, community groups, and incubating institutions could play a pivotal role by:

Promoting women's products.

Organizing marketing exhibitions and establishing permanent marketing spaces to create new opportunities for women entrepreneurs.

Stage G- Consumption

Current Challenges in Food Consumption

- Price Increases: The rising cost of agricultural production, logistics, and a depreciating currency have led to significant food price hikes, reducing affordability for a large segment of the population.
- Reduced Purchasing Power: Factors such as high unemployment, unpaid salaries, lack of cash, diminished savings, and soaring food prices have compounded food insecurity risks.
- Impact on Accessibility: Affordability remains the primary driver of food insecurity, especially in vulnerable communities, exacerbated by the security situation over the last two years.
- Changing Consumer Preferences
- Demand for Convenience: Consumers increasingly seek food options that offer:
    - Minimal preparation effort.
    - Innovative packaging tailored for convenience and ease of consumption.
    - Quick evaluation criteria like product appearance, color, labeling, and packaging.

Shifting Eating Habits: There is a growing trend toward consuming smaller, more frequent meals rather than adhering to the traditional structure of three-square meals a day.

Opportunities for Market Research and Food Technology

- Need for Urban Consumer Insights: Comprehensive research on urban consumer behaviors, preferences, perceptions, and attitudes is critical.
- Development of Convenient Traditional Foods: Innovation in food technology could create commercialized, easy-to-consume versions of traditional foods. This approach may:
- Boost local food consumption.
- Increase appeal to urban consumers seeking convenient meal options.

Table 36: Cooperative in the Value Chain by Governorate

Governorate	Roles	Insights
Tubas	- Primarily engaged in production and processing. - Limited involvement in marketing.	Cooperatives focus on the initial stages of the value chain but are beginning to explore marketing activities.
Tulkarm	- Active in production, processing, and marketing. - Focus on lowering production costs.	Cooperatives leverage their reputation to promote marketing and branding, alongside foundational roles in production and processing.
Jenin	- Comprehensive involvement, including production, processing, mark eting, packaging, storing, and hosting producers. - Supportive roles include providing raw materials, enhancing packaging, and fundraising.	Jenin's cooperatives span nearly all value chain roles, making them highly diverse and pivotal, with significant focus on support activities and awareness-raising efforts.
Qalqilya	- Focuses on production, processing, and marketing. - Includes initiatives in market expansion and supporting labeling/packaging.	Cooperatives address middle and early value chain stages while working to improve market access and bridge marketing gaps.
Salfit	- Engaged in production and marketing. - Provides raw materials and production spaces to members.	Cooperatives empower members by facilitating production lines, providing resources, and ensuring market access.

Nablus	- Emphasis on improving production quality, consistency, and packaging/labeling. - Active in marketing.	Nablus prioritizes product quality and branding, focusing on creating competitive and consistent products.

Key Observations

- Production Dominates: Across all governorates, production serves as a primary role for cooperatives, forming the foundation of their involvement in the value chain.
- Processing and Marketing: Many cooperatives are branching into processing and marketing, though these remain secondary focuses in several regions.
- Jenin as a Leader: Jenin displays the most diverse involvement, covering nearly all aspects of the value chain, including additional functions like hosting producers, fundraising, and raising awareness.
- Resource Provision: Salfit and Jenin cooperatives go beyond traditional roles by offering resources, tools, and production spaces, creating a robust support system for members.
- Innovation: Nablus: Nablus prioritizes product quality and branding, focusing on creating competitive and consistent products.

4.3.3 Challenges Facing Cooperatives in Value Chains

The chart summarizes the main challenges identified by surveyed cooperative management. However, it does not account for several critical issues observed by experts during interviews. These include:

- Operational Challenges: Issues such as resource allocation and inefficiencies in production processes.
- Marketing Barriers: Difficulty in reaching markets and navigating competitive environments.
- Cooperative Management and Governance Weaknesses: Deficiencies in leadership, organizational practices, and governance frameworks.
- Limitations in Current Business Models: Lack of innovative approaches to sustain and expand cooperative operations.
- Weak Networking and Membership Access: Challenges in creating effective networks and increasing cooperative membership.

Additional Barriers Specific to Women-Led Businesses
Traditional and Social Obstacles: Gender disparities in decision-making and access to resources.

- Family responsibilities that disproportionately limit women's involvement.
- Business Culture and Management Skills:
- Limited exposure to advanced practices and managerial expertise.
- Impact of Occupation: Political and economic instability affecting cooperatives' business environments, policy frameworks, and operational efficiency.

Figure 14: Main Challenges Facing Women-Led Cooperatives in Value Chain

The challenges reported by the surveyed cooperatives at the governorate level primarily reflect firm-level obstacles. These challenges hinder their ability to participate effectively in specific nodes of the value chain. Key issues include limited **market access**, **production scale**, **product quality**, as well as weaknesses in **branding**, **labelling and packaging**, and **quality management**. These factors collectively restrict cooperatives from maximizing their potential within the value chain.

Table 37: Product Value Chain-Nodes In The Value Chain And Proposed Interventions

A well-structured table summarizing the provided insights on challenges, value chain nodes, and proposed interventions for cooperatives across governorates:

Governorate	Main Difficulties in the Value Chain	Product Value Chain	Nodes in the Value Chain	Proposed Interventions
Tubas	1. Outdated production lines.2. Marketing difficulties.3. Labeling issues.4. Lack of refrigeration.5. Need for a new za'atar production line.	Focus on dried herbs (*za'atar*, chamomile, turmeric, ginger) and dairy products like Labneh & cheese.	Marketing and market linkages	1. Capacity building in marketing and market linkages.2. Improved labeling.3. New technology for *za'atar*production.4. Cold storage for dairy products.
Tulkarm	1. Lack of financial support. 2. Outdated equipment. 3. Labeling and branding challenges.4. Marketing issues. 5. Shortages in production inputs. 6. MOH permissions required. 7. Rehabilitation of production spaces.	Strong in honey, *Makdous*, mixed *za'atar*, pastries, Freekeh, and hot chili.	Marketing and input supply	1. Financial support for production. 2. Upgrading technology. 3. Improving branding and labeling. 4. Infrastructure rehabilitation.5. Product testing support.
Jenin	1. Fluctuating input availability.2. High operational costs. 3. Marketing struggles. 4. Lack of production tools and containers.5. Weak export readiness. 6. Rent and space constraints.7. Need for women-specific workplaces.	Diverse portfolio including Zatar Mix, pickles, Labneh, honey, *Makdous*, Freekeh, and grape leaves.	Input supplies and marketing	1. Capacity building for production and marketing.2. Export readiness training.3. Certification qualification.4. Infrastructure improvements.
Qalqilya	1. High cost of raw materials.2. Marketing challenges.3. Lack of market linkages.4. Outdated tools and machines.5. Lack of skilled labor.6. Labeling and packaging issues.	Tomato pastes and pickles dominate, followed by olive oil, frozen vegetables, and *kharoub molasses*.	Marketing	1. Capacity building in marketing and supply chain management. 2. Rehabilitation of greenhouses.3. Improved labeling and packaging techniques.
Salfit	1. High water supply costs.2. Lack of digital marketing skills.3. Financial constraints.4. Lack of raw materials.5. Energy consumption challenges.6. Farm damages caused by wild pigs.	*Za'atar* mix, pickles, *Makdous*, Freekeh, and olive oil represent a diverse product mix.	Raw material access and marketing	1. Construction of wells and fencing.2. Digital marketing training.3. Logistics support.4. Financial management training.5. Energy efficiency improvements.

Nablus	1. Weak financial resources.2. Lack of competitiveness with foreign products.3. High costs of cooperative products.4. Branding and packaging challenges.5. Low public support for local products.	Primarily focused on *za'atar* mix and olive oil, with strong specialization in traditional products.	Input supply and marketing	1. Access to finance.2. Branding and marketing capacity building.3. Packaging and labeling improvements for external markets.4. Product branding support.

4.3.4 Proposed Solutions for Optimizing Value Chains

Table 38: Constraints and Proposed Solutions in Value Chains

Suppliers

Constraints	Proposed Solutions
Inadequate market information.	Capacity building in supply chain management.
Limited access to finance, growth, and capacity to meet demand.	Encouraging Microfinance Institutions (MFIs) to coordinate with chain actors and offer affordable loan products.
- Poor consumer purchasing power.	Facilitating methods of transportation and product distribution through coordination with relevant parties.
Increased costs of imported inputs.	Providing training in supply chain management and efficient production techniques.
Shortages in supplies and quality inputs due to conflict.	Ensuring timely availability of inputs through improved resource coordination.
Lack of marketing and administration skills to manage operations.	Providing training in management, marketing, customer relations, etc.
Increased transportation costs and limited market access.	Coordinating transportation to ease logistical challenges and market entry barriers.
Increased taxes and ineffective regulatory policies.	Advocating for streamlined policies to reduce tax burdens and support industry growth.

Production and Processing

Constraints	Proposed Solutions
Lack of capital for investment and limited financial services.	Securing financing to invest in modern equipment like refrigerators and production tools.
Lack of infrastructure processing facilities.	Improving production facilities and transferring advanced technology.
Limited knowledge and techniques for manufacturing products.	Offering specialized training to producers on production practices, hygiene, quality control, and safety.
Inability to produce larger quantities due to capacity limits.	Enhancing skills through workshops and tailored training programs.
Shortages of experienced and skilled labor.	Building workforce skills through targeted training and apprenticeships.
Poor raw material quality and availability.	Improving supply chain management and ensuring access to high-quality inputs.
Limited access to and experience with modern technology.	Promoting the adoption of improved production technologies and processes.
Weak management practices affecting product handling and packaging.	Increasing awareness of consumer markets and trends through training and marketing strategy development.

Storage

Constraints	Proposed Solutions

Inefficient storage processes due to daily production demand.	Providing support to extend product shelf life for broader market distribution.
Lack of electricity for refrigeration and storage.	Training cooperatives on food storage techniques and effective packaging methods.
Limited knowledge of storage techniques and preservation substances.	Capacity building in production planning and inventory management.

Distribution

Constraints	Proposed Solutions
Distribution based solely on daily demand.	Facilitating market access through alternative transportation routes and improved logistics coordination.
High transportation costs.	Strengthening producer access to new markets through targeted distribution training and relationship-building with customers.
Competitive pressures leading to low-price sub-standard deals.	Developing competitive market strategies that prioritize quality and cooperative branding.
Restricted market access due to political closures.	Establishing alternative supply routes and exploring external markets for resilience.

Marketing

Constraints	Proposed Solutions
Lack of marketing techniques and strategies.	Offering marketing training programs to help cooperatives expand into new markets.
Many competitors limit market opportunities.	Strengthening business networks and partnerships with marketing companies in the private sector.
Small market niche and limited customer base.	Encouraging electronic marketing and improving value propositions.
Closed roads due to the political situation restrict market access.	Designing targeted marketing strategies and exploring alternative distribution channels.
Weak branding and packaging**.**	Developing attractive product branding and innovative packaging designs.

Consumption

Constraints	Proposed Solutions
Weak purchasing power among customers.	- Establishing widespread distribution channels to ensure product accessibility for all consumers.
Distance between customers and retailers/producers.	- Gathering consumer preference data and trend insights for targeted marketing strategies

Discussion points:

Primary Challenges: **Marketing**, **financial support**, **equipment shortages**, and **production inputs** are the most pressing issues. Tackling these challenges first can significantly enhance operations, while secondary priorities can be addressed subsequently.

Women-Led Cooperatives: Despite representing a substantial share of small producers, women and women-led cooperatives are often confined to less profitable stages of the value chain. They face difficulties engaging in more lucrative activities, emphasizing the need for targeted interventions.

Primary Role of Cooperatives: Many cooperatives struggle to meet their members' needs in increasingly competitive and unstable markets. They often operate under a traditional top-down approach, which limits their ability to adopt participatory and needs-based methods of self-empowerment. Key constraints include:

- Inefficient management and organizational capacity.
- Poor governance systems.
- Insufficient capital and technology to meet market quality standards.
- Strategic Recommendations

Innovative Mechanisms and Business Models: Develop institutional and operational frameworks to empower small-scale producers, particularly women. Address gender-based power inequalities and improve access to resources and choices.

Facilitating Women's Gains in Agricultural Value Chains:

- Promote capacity-building initiatives.
- Encourage the formation of women-only cooperatives, self-help groups, and women's associations.
- Strengthen market access, linkages, and infrastructure
- Advocate for increased control over assets such as land.
- Training Needs: Marketing strategies. Management skills for effective operations. Communication skills for stakeholder engagement. Accounting practices to improve financial oversight. Modern food production techniques.

Market Opportunities for Palestinian Specialties

Palestinian specialties are well-positioned to benefit from growing global interest in Middle Eastern cuisine. Key gaps identified include:

- Certified quality standards and food safety systems.
- Scale of production and technological support.
- Provide cooperatives with essential equipment such as:
- Electrical chili grinding machines.
- Manual packaging and wrapping machines.
- Small-scale pasteurization machines.
- Electronic scales.
- Introduce international promotion tools like websites, brochures, and business cards in English.
- Implement quality and food safety systems to achieve certifications.
- Establish a value chain approach that links producers to intermediary exporters like New Farm Company (NFC), equipped with business skills and resources.

4.3.5 Potential Promising Product/S Value Chain/S by Governorate:

When participants asked about Potential promising product/s value chain, they responded as follows:

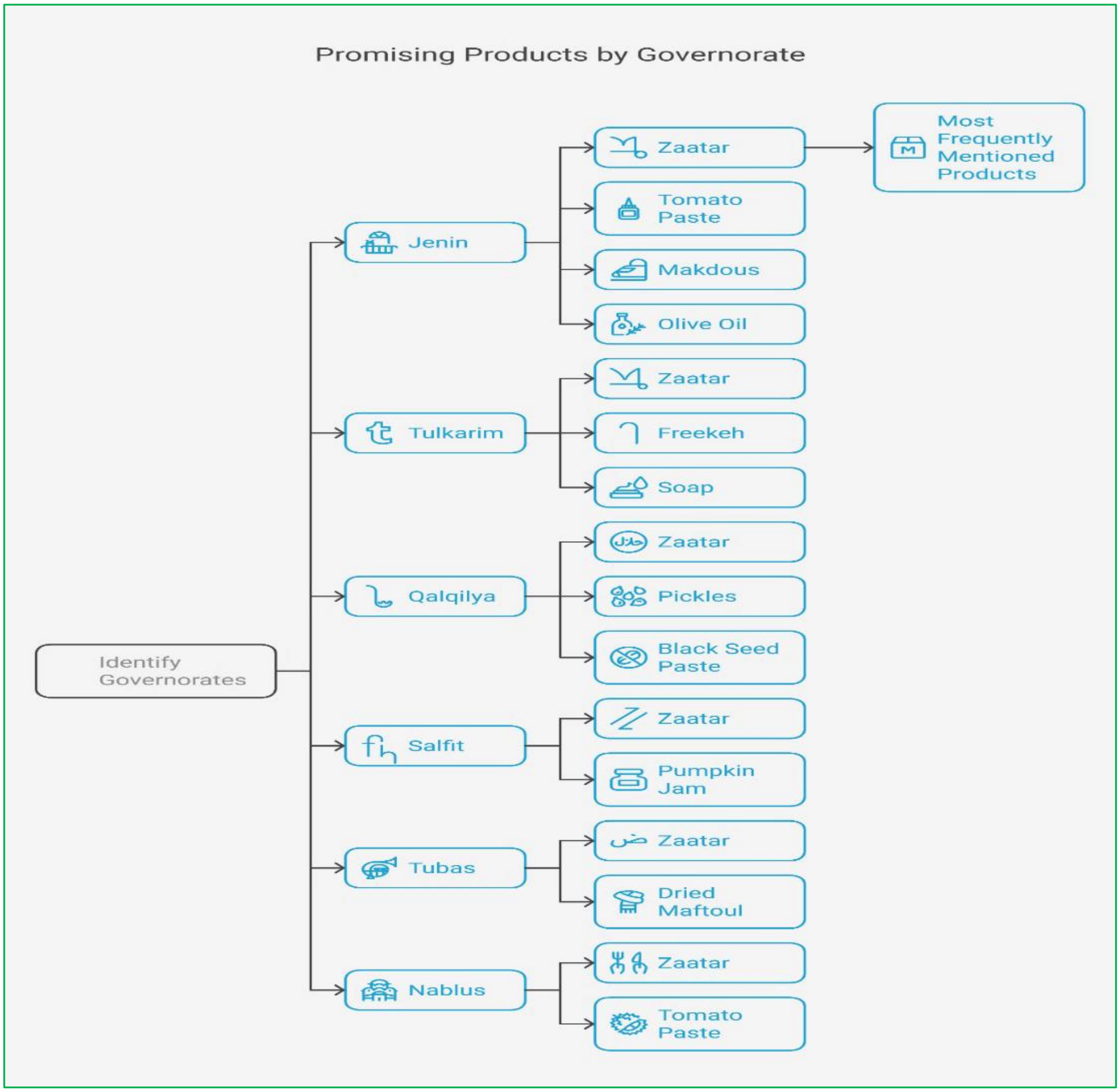


Table 39: Promising Value Chain per Governorate

Governorate	Key Products
Jenin	*Za'atar*, Tomato Paste, *Makdous*, Labaneh, Pickles (cucumber, olive, chili), Dairy Products. Freekeh, Bulgur, Dried Maftoul, Olive Oil (small packages). Herbs, Olive Oil Soap, Packaged Spices, Traditional Olives and Oil. Natural Honey Cream (made of honey and olive oil).
Tulkarm	*Za'atar*, Tomato Paste, *Makdous*, Pickled Grape Leaves, Freekeh, Frozen Vegetables and Drying. Soap, Dairy-related products. Branded and single packaged goods.
Qalqilya	*Za'atar*, Olive Oil and Butter, Pickles, Black Seed Paste, Tomato Paste. Dried Maftoul, Instant Vegetables, Lentils.
Salfit	*Za'atar* Mix, Freekeh, Pumpkin Jam, Pickles (Snake Cucumber, General). Olive Oil Soap, Tomato Paste.
Tubas	*Za'atar*, Dried Maftoul, Olive Oil Products.
Nablus	*Za'atar*, Tomato Paste, Olive Oil, Branded and Single Packaged Goods.

Most Frequently Reported Products

Key Products Across Governorates

- Za'atar: Dominates as the most frequently mentioned product, spanning multiple varieties such as mix, traditional, and herbs.
- Other widely reported products include:
- Makdous
- Freekeh and Maftoul
- Olive Oil
- Various Pickles (cucumber, olive, chili, etc.)
- Tomato Paste is another commonly noted product, reflecting its importance across multiple governorates.

4.3.6 Potential Cooperatives Roles Services in the Most Promising Value Chains

Cooperatives play a crucial role in addressing the challenges faced by women and supporting small-scale agricultural producers. Evidence highlights that well-functioning cooperatives possess the capacity to empower their members both economically and socially. By fostering equitable and inclusive business models, cooperatives can create sustainable enterprises and employment opportunities that are more resilient to external shocks.

Services Offered by Cooperatives

When supported with capacity-building initiatives, cooperatives can provide small producers with essential services that focus on:

- Access and Management of Natural Resources: Ensuring sustainable utilization of critical resources.
- Productive Resources, Technology, and Infrastructure: Enhancing productivity and income generation for small-scale producers.
- Market Access: Facilitating goods distribution and connecting producers with broader markets.
- Information and Skills Development: Empowering members with knowledge and training to build self-confidence and strengthen human capital.
- Collective Bargaining Power: Boosting negotiation abilities in both input and output markets.
- **Decision-Making Participation**: Promoting active involvement from grassroots initiatives to policy formulation.

These services enable smallholder farmers, especially women, to secure their needs and entitlements, capitalize on market opportunities, and contribute to poverty reduction and hunger eradication.

Empowering Women through Cooperatives

Women-led cooperatives provide a platform to amplify women's leadership roles and empower them economically. Despite their heavy workloads, including household responsibilities and labor-intensive agricultural tasks, women's contributions often remain undervalued and unpaid due to limited participation in decision-making processes at all levels—from the household to rural organizations. By advocating for greater access to and control over resources and productive inputs, women leaders can:

- Enhance women's productivity and incomes.
- Improve food availability and create decent work opportunities.
- Strengthen livelihoods and ensure sustainable development.
- Bridging Capacity Gaps for Greater Impact

The survey findings underline the critical role cooperatives can play in unlocking the potential of promising value chain products. However, their success depends on addressing existing capacity gaps. Effective programming should focus on:

- Strengthening resource access and management.
- Building inclusive decision-making frameworks.
- Enhancing leadership opportunities for women.

By bridging these gaps, cooperatives can help women and small-scale producers achieve economic self-reliance and foster sustainable community development

Table 40: Potential Cooperatives Roles Services in the Most Promising Value Chains and Identified Gaps

Governorate	Key Roles	Identified Gaps
1. Tubas	Purchasing inputs and raw materials, production, sales and marketing support, storage/logistics. - Limited efforts in market linkages and technical training. - Financial services and export promotion mostly unavailable.	- Low activity in eCommerce, digital marketing, financial services, export promotion, and policy advocacy.
2. Tulkarm	- Strong in purchasing inputs, production, and sales/marketing. Active in packaging and organizing exhibitions/trade shows. Some efforts in technical training and supporting new product development.	- Insufficient focus on policy advocacy, eCommerce, and branding enhancement.
3. Jenin	- Comprehensive services include purchasing inputs, production, sales/marketing, and storage/logistics. Focus on technical training, exhibitions, packaging, and supporting new products. Collective purchasing and market research initiatives.	- Underutilized branding enhancement and digital marketing, though progress has been noted in some areas.
4. Qalqilya	- Specializes in purchasing inputs, production, and marketing. Actively engaged in packaging, technical training, market linkages, and exhibitions.	- Limited activities in export promotion, policy advocacy, and eCommerce.
5. Salfit	- Broad portfolio includes purchasing inputs, production, marketing, storage/logistics, and technical training. Focus on exhibitions, packaging, branding enhancement, policy advocacy, and collective actions.	- Gaps in eCommerce and export promotion compared to other well-developed services.
6. Nablus	- Wide-ranging roles include purchasing inputs, production, marketing, storage/logistics, and exhibitions. Actively working on branding enhancement, managerial training, new product development, and packaging.	- Limited activity in policy advocacy and eCommerce but otherwise exhibits a well-rounded service portfolio.

Discussion Points

- **Purchasing Inputs and Production:** These services are universally offered across all governorates, demonstrating strong foundational support for agricultural activities.
- **Sales and Marketing Support:** Widely available, though the effectiveness of implementation varies by region, highlighting opportunities for improvement.
- **Technical Training and Coaching:** Present in several governorates, but not universally accessible. Some areas show limited focus, indicating the need for broader outreach.
- **E-Commerce and Digital Marketing:** Underdeveloped in most regions, representing a significant untapped potential for advancing market reach and customer engagement.
- **Export Promotion:** Provided inconsistently, with several governorates entirely lacking this support, underscoring the need for targeted initiatives.
- **Branding and Packaging:** Governorates like Salfit and Nablus have set benchmarks with their strong focus on branding and packaging, offering a model for others to follow.
- **Policy Advocacy:** Rarely available across governorates, reflecting limited representation in policymaking and the need for stronger advocacy mechanisms.

- **Women in Leadership:** To fully benefit women, producer organizations should be managed and owned by women or include active female involvement in management and decision-making processes.
- **Benefits of Cooperative Membership**: Much of the value derived from cooperative membership lies in the range of services provided, which may not be readily apparent when analyzing member incomes alone.

4.3.7 Recommended Value Chains

A- Dried Herbs Value Chains with Focus on za'atar in Tulkarm:
SWOT Analysis for Za'atar Value Chain in Tulkarm

Key Factor for Recommending Za'atar VC In Tulkarm:

One of the primary reasons for selecting Za'atar value chain in Tulkarm is its **economic importance**. Za'atar is a staple ingredient in Palestinian cuisine and a high-value crop for export. The industry generates millions in annual revenue and is growing at 10% per year, making it a significant contributor to the agricultural economy. Given the water-intensive nature of Za'atar farming, Tulkarm is an ideal location, as it has the lowest water prices in the West Bank, reducing production costs and increasing profitability for farmers.

Another important consideration is the **market potential** of Za'atar. There is strong regional and international demand for organic and fair-trade Za'atar, particularly in Middle Eastern and European markets. Organic certification increases product value by 15-20%**,** making Palestinian Za'atar more competitive in global trade. By integrating international food safety and labeling standards, Za'atar producers in Tulkarm can significantly expand their export reach.

The **participation of women in the Za'atar sector** further strengthens its selection as a priority value chain. Over 60% of Za'atar processing workers are women**,** making it a key industry for economic empowerment and job creation for female entrepreneurs. Women-led cooperatives account for 40% of total production**,** playing a vital role in enhancing financial stability for rural women. Investing in cooperative-based Za'atar production would provide direct support to women-led agribusinesses and increase local employment opportunities.

Finally, **branding and cultural significance** make Za'atar an ideal candidate for value chain development. Palestinian Za'atar holds strong historical and culinary importance, making it an excellent product for premium culinary branding and international promotion**.** Digital marketing campaigns have the potential to increase Za'atar exports by 25%**,** helping Palestinian producers access a wider global market. By strengthening branding strategies, Palestinian Za'atar can be positioned as a high-value, authentic product**,** reinforcing its importance in national and international trade.

Table 41: SWOT Analysis for Za'atar VC in Tulkarm

Factor	Strengths	Weaknesses	Opportunities	Threats
Production	Strong tradition of za'atar farming in Palestine; widely used in Palestinian cuisine	Limited access to organic certification; cross-contamination risks	Expanding organic production and fair-trade certification	Climate change affecting plant yield
Processing & Packaging	Established local expertise in drying, grinding, and blending	Need for modern processing techniques to meet international standards	Access to international markets for packaged za'atar	High costs of packaging & labeling for export
Market Access	Strong domestic demand and cultural significance	Limited export volume due to trade restrictions	Targeting Middle Eastern & European specialty food markets	Competitors from Jordan & Lebanon dominating regional exports
Women's Participation	60% of za'atar processing workers are women	Limited financial access for female farmers	Women-led cooperatives can strengthen rural livelihoods	Cultural barriers to women managing large-scale agricultural businesses

Figure 15: Core functions in thyme / za'atar value chain, activities and actors in targeted

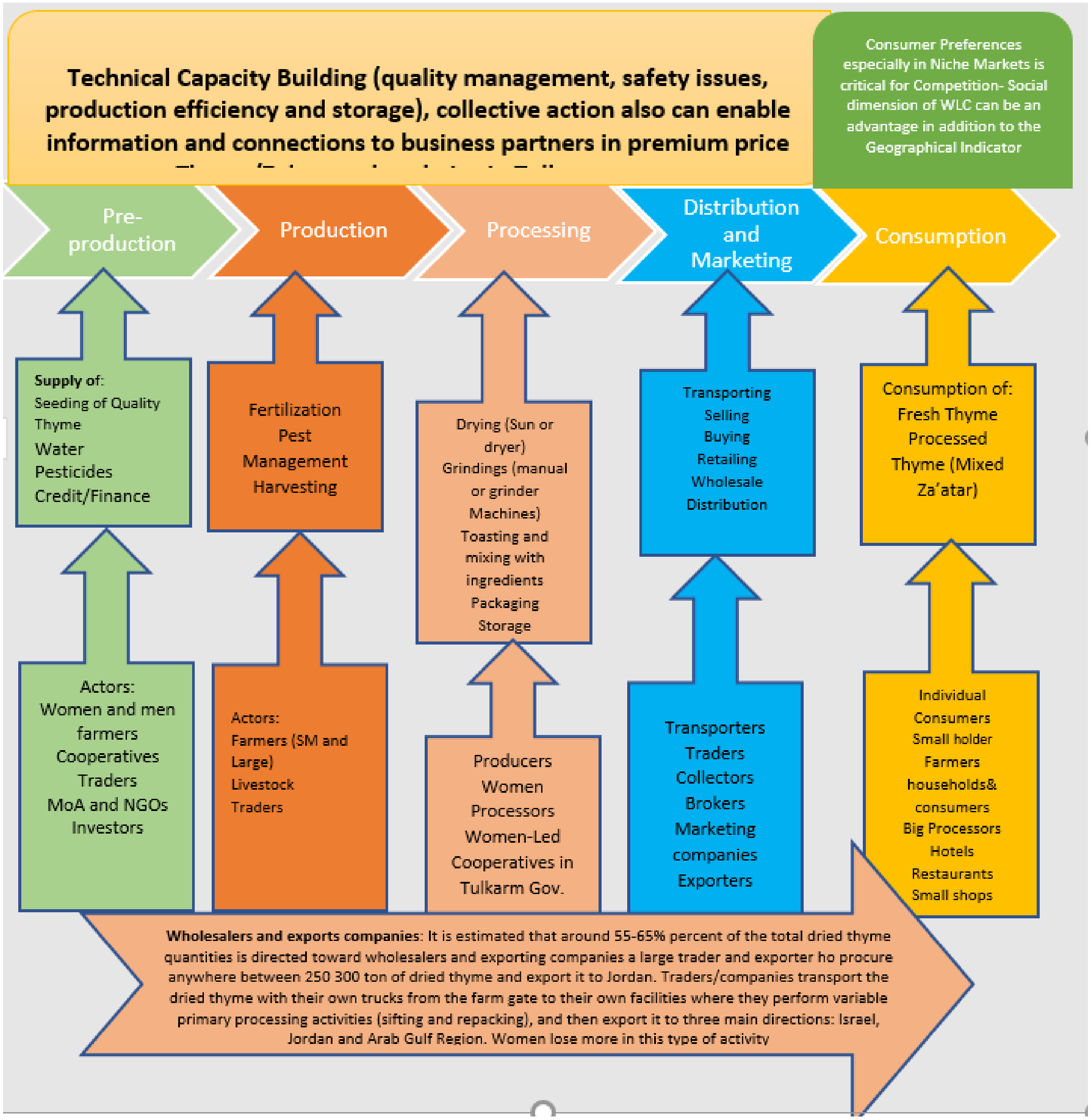


Table 42: Dried Herbs Value Chain Analysis

Stage	Actors Involved	Challenges	Interventions
Cultivation	Farmers, Cooperatives	Limited land access, climate impact, Water scarcity and soil degradation impact herb cultivation.	Sustainable farming, subsidies, Providing grants and microfinance options for small-scale herb producers.
Harvesting	Farmers, Local workers	Labor shortages, manual techniques, Weak coordination between farmers,	Mechanization, skill training

		processors, and distributors leads to inefficiencies.	
Drying & Processing	Producers, Factories	Inconsistent drying and processing methods affect product quality and competitiveness, high costs	Training farmers in modern drying and processing techniques to improve quality. Modern drying tech, standardization
Packaging	Manufacturers, Exporters	Poor branding, lack of certifications	Improved packaging, certification support
Distribution	Traders, Retailers	Trade restrictions, supply chain fragmentation	Logistics support, trade facilitation
Market & Sales	Retailers, Consumers	Price fluctuations, limited demand, Palestinian producers often struggle to reach local and international markets due to trade restrictions. Export regulations and certification requirements can be difficult for small-scale producers to meet.	Marketing campaigns, e-commerce, Connecting Palestinian producers with international buyers and fair trade networks. Addressing trade restrictions and improving export regulations.

Recommendations

1. **Support cooperatives improve their ability to market thyme products in the Value chain: Build the marketing capacity of the cooperatives and promote their cooperation in production and marketing,** more specifically, build the capacity of the targeted cooperatives in the za'atar value chains in the following areas:

- **Build the targeted cooperatives capacity to market farmers and processors' products and improve their access to market information**: the targeted cooperatives can be guided to establish business relations with large food stores and large supermarkets to sell thyme/za'atar product, assist these cooperatives to open channels with luxury restaurants and hotels to market thyme. Link these cooperatives with private sector companies like Al-Reef, Canaan Fair, and NFC that have social enterprise characteristics, to access and establish more stable market channels and quality standards for processed food products by women
- **Support these cooperatives to engage with women's NGOs to facilitate a larger network of women's CBOs for broader economic** as well as social empowerment. YWCA and Businesswomen's Forum has a greater understanding about business orientation, and they could be provided with strategic support to create a greater economy of scale, instill market orientation among women's groups, and explore the potential to facilitate common brand, packaging, and quality standards to meet market demand.
- **Support targeted CBOs to demonstrate the unique attributes of their thyme products**: the thyme/za'atar produced in the targeted locations have unique attributes that should be highlighted and to be well-known by customers, an awareness and promotion campaigns can be introduced to exhibit the unique attributes of thyme/za'atar focusing on the special attributes the organic cultivation of thyme and the use of high quality ingredients like pure olive oil and Baladi sesame.
- **Support the cooperatives to brand the rain-Fed thyme: Rain**-fed thyme has unique attributes especially when it's come to taste, flavor, and aroma, however, these unique attributes are not well utilized by producers, accordingly, these cooperatives can develop a brand for the rain-fed thyme/za'atar produced in the localities, which will help to differentiate the rain-fed thyme and

za'atar from the irrigated thyme in a way that support both the cooperatives and the farmers to capture higher prices for their products.

- **Facilitate cooperatives access to export market** small farmers and processors' access to export market was constrained by their limited ability to produce large quantities of thyme/za'atar, accordingly, it important to support the cooperatives to organize small farmers/processors to sell their production through the cooperatives and connect the cooperatives to marketing companies or to tap directly into the regional markets, this should go together with guiding targeted cooperatives through the best practices in production processes to produce a high quality products and adhere to quality standards needed in regional and international markets.

2. **Support the targeted cooperatives in the VCs to develop their products and improve its quality.**

- Develop a collective package and brand for the three cooperatives in the VC in such a way that promote the cooperation between the cooperatives, and adopt a unified price for their products, and test the bulk marketing of the cooperative's products.
- Guide the cooperatives in the VC through the best practices in thyme processing: As indicated in the constraints section, targeted cooperatives in the rural areas don't have a clear idea about the right quantity and quality of each ingredient (Especially thyme and sesame) that should be used to produce high quality products, so it's important to guide targeted cooperatives through the production processes to produce a high quality products and to adopt best practices in processing. Equipping the Cooperatives with more productive assets: (including the provision of thyme driers) will enable these organizations to control the quality of thyme/za'atar.
- **Support farmers including women to dry their fresh thyme under shaded areas**: Drying thyme under the sun and in open areas affects negatively both the aromatic characteristics of the plant and reduces the levels of its active The ingredient (thymol), it also expose the thyme to the wildlife and to the contamination by animals, thereby affecting the safety, taste and the quality of the final product.

Based on the discussion with experts it was indicated that a greenhouse that extends over an area on 1,000 m2 can serve a group of 7-10 small farmers to dry their fresh thyme. Hence, it important to promote the cooperation between small farmers and support them to establish greenhouses as a mean to improve the quality of their products
Source *(Value Chain Analysis for thyme as an agro-based income generating project for poor women*

- **Expand the proportion of green thyme the VC in the overall farmer's sale**: Fresh thyme provides much higher returns to farmers than dried thyme, so it important to promoted and increase the sales of fresh thyme to increase farm revenue. This should be done through improved extension, demonstration and facilitation of trade linkages between men and women small-scale producers and buyers of fresh thyme. Focus should be given to promoting linkages between institutional buyers of fresh thyme, such as restaurants, traditional pastry shops, and retailers and small-scale producers.
- **Capacitate farmers including women to sell their products through marketing channels that offers the highest profit margins:** This comes with great challenge considering the fact that wholesales, middlemen and thyme processing companies are the main players in the market, however, supporting the CBOs to establish retail outlets in the major city centers will be a good a way to reach out direct customers and sell thyme in higher prices, improving cooperatives linkages with restaurants, hotels, and pastry shops, would also be a good way to reach out high end markets.

B- Makdous Value Chain in Jenin

One of the primary reasons for selecting **Makdous in Jenin** is its **economic impact**. Makdous production has grown significantly, with Jenin producing over 500 metric tons annually. The industry also has a strong export growth rate of 15%**,** showing increasing international demand for artisanal Palestinian foods.

Another key factor is **women's employment in the value chain**. 70% of the workforce in Makdous cooperatives are women**,** making it an ideal sector for **female economic** empowerment and business expansion**.** Supporting women-led production ensures financial stability for rural women entrepreneurs and cooperative-based enterprises**.**

The **market potential** for Makdous is also substantial. There is strong consumer interest in handmade, traditional Palestinian foods**,** with hotels and restaurants projected to increase purchases by 40%**.** Expanding domestic and international market reach can significantly enhance the economic sustainability of Makdous producers in Jenin.

Finally, **branding and tourism opportunities** make Makdous an ideal candidate for value chain development. Palestinian culinary tourism is growing by 20% annually, offering opportunities to **integrate** Makdous into food tourism experiences**.** Promoting it as a specialty product within Palestinian cuisine can increase visibility and strengthen demand in hospitality sectors and export markets**.**

SWOT Analysis for Makdous Value Chain in Jenin

Table 43: SWOT Analysis for Makdous VC in Jenin

Factor	Strengths	Weaknesses	Opportunities	Threats
Production	High-quality local ingredients (eggplants, walnuts, olive oil)	Lack of standardized processing & preservation methods	Improving food safety standards to enter premium markets	Supply chain instability affecting raw ingredient costs
Processing & Storage	Traditional small-batch production ensures authenticity	Short shelf life and preservation challenges	Investment in modern storage techniques	Lack of technical expertise in preservation
Market Access	High demand for Palestinian artisanal foods	Low brand visibility beyond local markets	Culinary tourism and regional trade expansion	Competition from industrially processed alternatives
Women's Participation	70% of Makdous production workforce consists of women	Low representation of women in business ownership	Women-led cooperatives could promote product branding	Market volatility impacts cooperative financial stability

Table 44: Makdous Value Chain Analysis

Stage	Actors	Challenges	Interventions
Raw Material Sourcing	Farmers	Limited land, climate impact, Sustainable farming, water scarcity, financial aid, limited access to raw	Enhancing farming techniques and ensuring stable access to raw materials.

		materials like eggplant, olive oil, cucumber due to fluctuating agriculture yields.	Providing grants and microfinance options for small-scale food producers., implement smart irrigation
Processing & Preparation	Producers, factories	Quality inconsistencies, high costs, Food safety standards and certification requirements can be difficult for small-scale producers to meet, and certification Inadequate storage and transportation facilities affect product quality and distribution efficiency. High production costs and limited financial support hinder business expansion.	Investing in better storage and transportation solutions, standards to ensure consistent quality, strengthening food safety regulations and certifications, improve eco-friendly packaging and attractive branding ensure adherence to international food safety standards, leverage QR code labeling for consumers engagement
Packaging	Manufacturers, exporters	Branding issues, certification barriers	Improved packaging, labeling, , and branding
Distribution	Traders, retailers	Trade restrictions, fragmented logistics, inefficient supply chain	Supply chain optimization, optimize distribution networks and streamline logistics, establish distributors for expanded market reach, explore block chain solutions for transparent trade processing
Market & Sales	Retailers, consumers	Price fluctuations, demand shifts, price fluctuation, export limitation, regional competition	Connecting Palestinian producers with regional and international buyers.

Niches and consumer experience

• The market for niche products such as Makdous is growing. Such niche products will continue to emerge and be provided to consumers as unique products,
• Consumers are willing to pay premium prices for products that have consistently good taste.
• Because product taste is an invisible quality element, storytelling and branding are needed.

Recommendations

Recommendations in the previous section are mostly applicable; however, this value chain have some specific recommendations:

1. **Provide capacity building in the following areas:**

- Support the implementation of standardized processing & preservation methods, conformity of Product quality, especially taste is very critical in Makdous markets
- Support the provision of green technology
- Support Packaging and sealing since these are very critical issue for distribution
- Because of short shelf life and preservation challenges, provide technical capacity to extend shelf life
- Support the stability and quality of raw materials

2. **Build the market capacity of these cooperatives in the VC**

- Provide training to management and staff in the areas pricing strategies, and market entry
- Because Low brand visibility beyond local markets, support establishing attractive plants
- Support women led cooperatives in this VC in adopting digital marketing
- Support cooperatives in the chain to participate in trade exhibitions
- Provide market information especially in the export markets
- Communicate with marketing companies like Reef marketing

Finally, according to ITC research, Thyme/Za'atar, Maftoul, Makdous, and Freekeh have been identified as products with the highest potential for growth and export opportunities. Alignment with National Investment Plan: These products align with recommendations from the National Investment Plan (2020–2022), reinforcing their importance in advancing agricultural and cooperative-driven value chains.

4.4 Main Green Practices in Cooperatives:

Empowering Women through Green Practices: Green practices in cooperatives present *a* promising model for empowering women through sustainable approaches and economic opportunities. Research findings reveal that such practices can: Enhance women's socio-economic status by improving **production**, **market access**, **financial stability**, and **decision-making roles**. Drive cooperative engagement among rural women entrepreneurs through factors like **education**, **credit access**, **and availability of inputs**, **training**, and **experience** However, several challenges remain: **Male dominance** in decision-making processes. Limited access to training and transportation. Shortages of skilled labor and gaps in market information. Despite these obstacles, women-led cooperatives stand to benefit from: Higher pricing for organic products. Increased bargaining power. Timely access to inputs and training opportunities.

Future Needs: To further support women's participation, policymakers and decision makers must focus on: Improved education and continuous training. Introduction of efficient technology and access to high-quality inputs. Development of better infrastructure and promotion of digital tools for enhanced market access.

Environmental Contributions of Women-Led Cooperatives: Some cooperatives surveyed are actively engaged in environmentally positive practices, such as: Recycling and using organic materials. Producing natural products with minimal reliance on chemicals or polluting agents.

Participants also highlighted that women-led cooperatives, typically small in scale and agriculturally focused, often prioritize: Sustainable, non-harmful materials for production and packaging. Recycling and adopting environmentally friendly waste management practices. Local, eco-friendly materials in their operations, aligning with sustainable business models.

These initiatives reflect the environmentally friendly approach adopted by women-led cooperatives, even when such practices are not the primary focus of their core business. This refined text highlights the socio-economic and environmental benefits of green practices in cooperatives, while addressing barriers and suggesting actionable solutions for stakeholders

4.4.1 Resources Consumption Analysis: Average Energy and Water Consumption in Cooperatives

Energy Consumption (kWh per Ton): Given that the Average production per cooperative is 33.6 tons for all products, the average energy consumption per ton of production, adjusted for 16 percent VAT and based on an electricity price of $0.175 per kWh, was found to be 218 kWh per ton of production in 2024. This figure reflects the net energy costs divided by production volumes and converted to kWh for accuracy. The high energy usage noted in some entries highlights areas where improved efficiency practices could help reduce consumption and associated costs. High energy consumption per ton in certain cases reflects inefficiencies in production processes. Adopting **energy-efficient production methods** and implementing **advanced technologies** could significantly reduce energy usage and associated costs.

Water Consumption (m^3 per Ton): Given that the average production per cooperative is 33.6 ton for all products in 2024, and the average water consumption per firm is 150 m^3, the average water consumption per ton of production across all entries for (2024) was calculated at 4.4 m^3 per ton of production. This average was determined by analyzing total water costs relative to production volumes for both years. The data reveals significant variations in water usage, primarily influenced by differences in production scale and efficiency across cooperatives.

4.4.2 Renewable Energy Systems in Cooperatives

Table 45: Summary of Key Findings for the Renewable Energy: Renewable Energy Systems in Cooperatives

System Type	Used and No Need For Development (percent)	Used But Need Development (percent)	Not Used But Urgently Needed (percent)	Not Needed At All (percent)
Renewable Energy Systems	19.5 percent	17.1 percent	51.2 percent	2.4 percent
Water Recycling Systems	0 percent	9.8 percent	61.0 percent	4.9 percent
Solid Waste Management Units	0 percent	12.2 percent	63.4 percent	0 percent
Liquid Waste Management Units	0 percent	14.6 percent	65.9 percent	2.4 percent

Key Observations and Discussion:
This following discussion provides a consolidated overview of the needs and current statuses of the systems, which can be used to prioritize areas for improvement and investment

- Renewable Energy Systems: About 51.2 percent of cases show an urgent need for implementation, with only 19.5 percent being fully functional.
- 17.1 percent of systems are in use but require development.
- Water Recycling Systems: A significant 61.0 percent of cooperatives indicate an urgent need for implementation, with 9.8 percent requiring upgrades to existing systems.
- Solid Waste Management Units: The majority (63.4 percent) of the surveyed cooperatives require urgent implementation, while 12.2 percent are operational but need development.
- No units are reported as fully functional without development.
- Liquid Waste Management Units: The highest demand by cooperatives (65.9 percent) is for urgent implementation, with 14.6 percent of them requiring development.
- No systems are fully operational.

4.4.3 Waste Management:

The analysis reveals notable variations in resource consumption and waste management across the dataset: **Water Consumption**: Average annual water usage per firm stands at **150 m^3**, equating to approximately **4.4 m^3 of water per ton of production** in 2024. **Solid Waste**: Estimated at **0.105 tons per ton of production** in 2024. **Liquid Waste**: Recorded at **2.58 m^3 per ton** in 2023, though insufficient data for 2024 limits comprehensive trend analysis.
These findings emphasize opportunities for enhancing sustainability through:

- Improved production processes.
- Adoption of advanced technology.
- Promotion of recycling initiatives.
- Investment in skills development and training.

Relevance of Green Businesses
A study by ESCWA titled *“The Role of Small and Medium-Sized Green Businesses in Sustainable Development”* highlights the impact of green businesses, including women-led cooperatives, on the three dimensions of sustainability: **economic**, **social**, and **environmental**.
Green businesses contribute to **economic growth** by improving efficiency, reducing internal costs, and increasing profit margins. This rationale applies directly to the surveyed cooperatives, which align with sustainable development goals.

. **Energy Efficiency:**

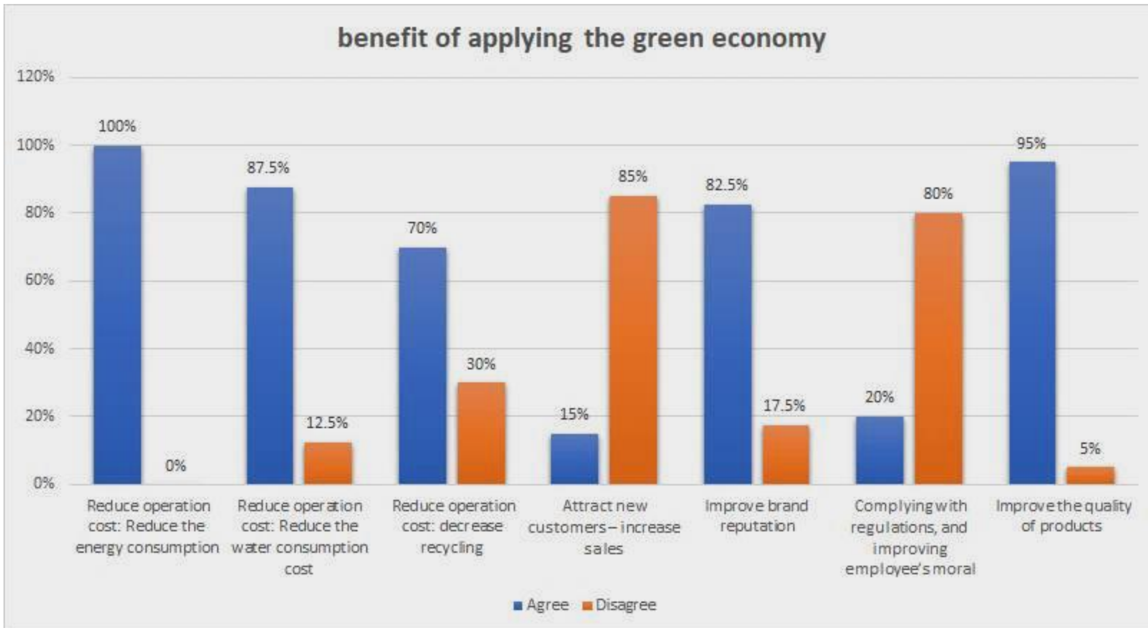
4.4.4 Benefits of Applying Green Practices

The responses from cooperatives underline their understanding of the importance of green economy practices, reflecting the **social**, **economic**, and **environmental objectives** of social entrepreneurship.
Key Observations:

- Positive Impact: The cooperatives’ core missions emphasize sustainability, which fosters broad benefits across multiple dimensions.
- Challenges:
- Limited success in attracting new customers.
- Difficulties in complying with regulations.

These challenges are attributed to the small scale of most cooperatives, their primary focus on local markets, **low public awareness**, and the weak enforcement of regulations in the current business environment.

Figure 16: Benefit of Applying Green Practices



Summary and Conclusion

Published research underscores the transformative role of green practices within cooperatives in enhancing the socio-economic conditions of rural women entrepreneurs. Membership in green-practicing cooperatives yields numerous benefits, including:

- Improved Economic Outcomes: Members achieve better living standards, increased incomes from green farming, and access to essential resources.
- Empowerment and Capacity Building: Cooperative involvement fosters higher levels of education, active participation in decision-making, and stronger roles in economic processes.
- Members of green-practicing cooperatives also experience:
- Higher Yields and Productivity: Enhanced agricultural practices lead to better market prices and more consistent income stability.
- Increased Market Strength: Cooperatives collectively improve members' bargaining power, provide access to credit, and ensure the availability of essential inputs, bolstering economic well-being.

Persistent Challenges

Despite these advantages, several barriers remain:

- Male Domination: Leadership and decision-making in cooperatives are often male-dominated.
- Market Information Gaps: Inadequate access to market insights limits strategic growth.
- Irregular Input Supply: Unreliable access to production inputs affects operational efficiency.
- Education, credit access, availability of inputs, and training play pivotal roles in driving women's active participation in cooperatives.

Economic Impact

The economic benefits of cooperative membership are evident in tangible outcomes, including:

- Increased daily sales.
- Higher incomes and investments.
- Enhanced savings, reflecting overall financial stability and growth opportunities.
- These improvements empower women to secure sustainable livelihoods and contribute meaningfully to community development.

Future Research Directions
To maximize the potential of green-practicing cooperatives, future studies in Palestine should focus on:
- Sustainability: Examining the long-term viability of green practices within cooperatives.
- Digital Technology: Exploring the role of digital solutions in overcoming market and logistical challenges.
- Gender-Focused Interventions: Assessing how targeted initiatives can enhance cooperative success for women.
- Comparative Studies: Evaluating regional variations to identify contextual factors influencing the effectiveness of green practices in empowering rural women entrepreneurs.

- Increased Market Strength: Cooperatives collectively improve members' bargaining power, provide access to credit, and ensure the availability of essential inputs, bolstering economic well-being.

4.5 Supporting Functions to Develop Value Chains

A- Access to Finance: Credit Services

Access to finance remains a significant challenge for small producers, both male and female, in the West Bank and targeted regions. However, the situation is particularly difficult for women, who often lack asset ownership that can be used as collateral.
Supply-Side Challenges:
Limited Financial Offerings: Local development and financial institutions provide minimal finance options due to insufficient product development and concerns about the risks associated with agricultural lending.
Lack of Interest from Large Banks: Major financial institutions avoid engaging with small producers due to:
- The small size of loans.
- The absence of collateral.
- The high risk of repayment defaults.

Current Credit Sources:
Input Suppliers: The main source of credit for small producers comes from input suppliers. While they allow purchases on credit, they often charge higher prices as a trade-off.
Barriers for Women and Small Producers:
- Women and small producers are particularly discouraged from seeking finance due to:
- The unpredictable nature of agricultural sales and prices.
- Hesitation to engage with commercial banks, given the complexity of loans.
- Limited collateral options, especially among women.

These systemic challenges underscore the need for tailored financial solutions to address the unique constraints faced by small-scale producers, especially women, to enable equitable access to credit and resources

B-Business Development Services

Challenges with Previous Capacity-Building Programs

Cooperative members expressed dissatisfaction with previous capacity-building initiatives, citing the following issues:
- Length and Format: Trainings were often perceived as overly long, too theoretical, or insufficiently tailored to the specific circumstances and developmental needs of their enterprises.

- Consideration for Women's Workloads: Training programs frequently failed to account for the competing demands of women's household and agricultural labor, limiting their ability to participate effectively.
- Technical Knowledge Gaps: Experts delivering training lacked specialized knowledge related to specific product areas.

Timing of Grants: Poor timing and allocation of grant disbursements rendered them less effective in fostering competitiveness.

Recommended Interventions

To address these challenges and improve cooperative development, targeted training and coaching sessions should focus on:

- Quality Production Management: Implementing standardized production procedures and good food production practices.
- Pricing Strategies: Equipping cooperatives with tools to develop competitive pricing models.
- Quality Control and Packaging: Enhancing processes for product quality assurance, packaging, and labeling.

Additionally, the development of standardized production manuals and quality management protocols for high-potential food products is critical. These manuals should be crafted by food technology experts with private sector expertise to ensure practical applicability and consistency.

Role of Marketing and Exporting Companies

Palestinian marketing and exporting companies, such as Al-Reef Agricultural Investment and Marketing Company and Canaan, have demonstrated significant success in exporting large volumes of products (e.g., over 100 tons) and meeting international standards for product branding, labeling, and quality. These companies can be incentivized to collaborate with more cooperatives and small-scale producers, including women, leveraging their experience to drive market access and export opportunities [55]

Al Jabal Company: *Tareeq al-Jabal: A local youth company since 2023, promoting cooperative goods, including women's produce. The company combats surplus stock, offering sales platforms and crafting digital content to showcase farmers' stories and product lifecycles from cultivation to global consumers.*
Products: Apple cider vinegar, Honey, Hot sauce, Maftoul, Makdous, Olive Grains, and Tomato paste
Local Partners include: Dura Cooperative Association for Agricultural Industrialization, Baqa Al Sharqiya Agricultural Cooperative Society, and Beekeepers Cooperative Society in Jenin, Riyada Cooperative Society for Thyme and Honey, Jayus Cooperative Society in Nablus, Al-Shuyoukh Cooperative Society for Productive Livestock
We have partnered with over 15 Point of Sales across Palestine, the sites that sells the company products are distributed all over the West Bank

C-Networks and Networking

Business forums serve as critical hubs connecting governmental and nongovernmental organizations, financial institutions, and other entities. They facilitate synergies, information flow, networking, and extend essential support services to small-scale and women-owned businesses, which are often concentrated within these networks.

Membership Insights

Only **41 percent** of respondents reported membership in networks, while **59 percent** stated they do not belong to any network, indicating a high level of isolation among cooperative groups across the six governorates.

[55] Based on research by UNCTAD at https://unctad.org/system/files/official-document/ditc2022d2_en.pdf

Table 46: Cooperatives Networks

Organization Name	Frequency	Classification
Union of Cooperative Societies	7	Local
Rural Women Development Association	5	Local
Small Enterprise Center	5	International
Cooperative Union for Marketing Cooperative Products	4	Local
Union of Agricultural Associations	3	Local
Farmers' Union	2	Local
Taawony	2	Local
YWCA (Young Women's Christian Association)	1	Local
Asalah	1	Local
Caritas	1	Local
PARC (Palestinian Agricultural Relief Committees)	1	Local
ARJJ (Applied Research Institute - Jerusalem)	1	Local
Handicraft Union	1	Local
Chamber of Commerce	1	N/A
Arab Beekeepers Union	1	Regional
Union of Beekeepers of the Mediterranean Basin	1	International
Farmers' Association of Jenin Governorate	1	Local
Cooperative Work Committees	1	Local
Palestinian Center for Economic and Social Development	1	Local

D- Information and Market Research:

Small farmers and women primarily rely on middlemen and traders for market information, alongside representatives of processing companies they supply to. Typically, this information focuses on: Buyer requirements (e.g., product sizes), Pricing trends, and Changes in market demand. However, many farmers and women processors report concerns about the **lack of transparency** among traders, particularly regarding: The pricing of their products in end markets, and Future demand forecasts.

Challenges Identified

Limited Market Research and Information:

- Research results, supported by ILO findings, reveal that cooperatives receive very little updated market research.
- Only a few supporting organizations offer training in marketing at local, regional, and national levels or promote international exports.
- Such initiatives are often tied to time-limited projects, reducing their long-term impact.

Access to Markets:

- Sustainable access to local and international markets is critical for the success of Palestinian cooperatives, especially within the constraints of the Israeli occupation.

Key Barriers:

- Limited access to urban and regional markets due to weak relationships with marketing stakeholders.
- Lack of critical information to understand consumer preferences before production.
- Insufficient marketing and technical skills, best manufacturing practices, linkages, and access to distribution channels.

Summary

Cooperatives are intended to facilitate access to high-end markets for women and small-scale farmers.

However, they have yet to fulfill this role due to:

- Poor connections with marketing stakeholders.
- Limited expertise in marketing, technical skills, and distribution.
- Lack of support in building comprehensive market linkages.
- Addressing these challenges through targeted capacity building, improved market research, and robust stakeholder engagement will be crucial to strengthening cooperatives and empowering small farmers and women processor

5.0 RECOMMENDATIONS

5.1 Recommendations for the Government of Palestine

Women farmers must be supported in claiming their right to inherit agricultural land, since owning and registering land in their name allows them to benefit from agricultural projects and facilitates their access to necessary funding.
Women must have access to long-term loans with low interest rates that enable them to rent land and rent or purchase other material resources that are necessary to develop their products.
A gender audit of the Ministry of Agriculture should be conducted to assess gaps and opportunities in enhancing gender mainstreaming and gender sensitization in its policies and strategies.
The involvement of women's organizations and cooperatives and of individual women farmers in processes of decision making and policy formulation should be strengthened and streamlined.
The role of the gender focal point in the MoA should be strengthened by enhancing their capacities and terms of reference.
Capacity building for the monitoring and evaluation unit at MoA is needed to understand changes in women's status in rural areas. » A sex-disaggregated database on agriculture and the rural sector must be created, based on the SDGs and relevant national indicators, as identified by PCBS.
Advocacy campaigns must be launched at the international and local levels to shed light on the realities of land confiscation, movement restrictions, control over water resources, limited access of women and men to their lands, and daily harassments from settlers.
The national strategy for the agricultural sector should include a detailed guide on how to mainstream gender perspectives into all agricultural VC activities for both crops and livestock.
Government ministries should establish mechanisms to monitor and evaluate the activities of women, men and rural youth in agriculture and rural development.
Gender-responsive budgeting (GRB) must be developed as a step not only towards accountability regarding women's rights but also towards greater public transparency, economic stability and concrete actions for women's empowerment. Additionally, GRB will help the Government understand how to adjust its priorities and reallocate its resources, to fulfil obligations towards equality.
Local governance must better support marginalized areas by developing major bypass roads and by creating alternative safe and equitable roads for farmers[56]

5.3 Recommendations for other stakeholders

A network should be created among local cooperative associations on one hand and local and international organizations on the other to create a platform where women can exchange information, knowledge, expertise and experiences.
Knowledge and awareness of local partners in terms of gender integration and mainstreaming in project cycles should be strengthened, with a focus on monitoring and evaluation[57]

[56] Based on FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en,2022
[57] Based on FAO. 2021. Country Gender Assessment of the agriculture and rural sector – Palestine. Rome. https://doi.org/10.4060/cb4824en,2022

5.4 Recommendations for championing gender-responsive value chain interventions

Identify and promote specific women-led activities in the agricultural value chain: Rural economies operate via gender-specific roles. Therefore, certain points in the value chain are dominated by women. For example, women may typically oversee the processing of a staple crop (e.g. Freekeh) or retailing a dairy product (e.g. traditional white cheese). Interventions directed towards strengthening the part of the chain dominated by women can generate maximum benefit.

Encourage and enable women's participation in male-dominated nodes of agricultural value chains: Design interventions that advance the inclusion of women in the more profitable nodes of value chains or nodes that are traditionally or typically controlled by men.

Address constraints to women's participation in value chain interventions: Initiate interventions providing women access to productive resources such as agricultural inputs, mechanization, finance, advisory and business development services along with a favorable institutional environment.

Support complementary interventions: Interventions that give women more time—such as childcare, social and behavioral communication targeting households and communities, and engaging men and boys—may enable effective participation and empowerment of women in agricultural value chains.

Capacity-building and improved access to information, education and training: Provide women with the skills, training, abilities, resources, and information necessary to enhance their experience with agricultural value chain interventions.

Assist in the formation of women's groups: Boost the presence of women's cooperatives, self-help groups and other women's associations to provide an enabling environment for their participation in agricultural markets and value chains.

Future research focused on collecting gender-specific data: Conduct research that measures impact on men and women separately to help design effective targeted interventions[58].

[58] Benefited from Malhotra, Suchi Kapoor, and Edoardo Masset. 2024. Agricultural value chain interventions can improve women's incomes, assets holdings, productivity and savings. Nairobi, Kenya: CGIAR GENDER Impact Platform.

ANNEXES

Annex 1: List of Agricultural Cooperatives in Jenin and Nablus Governorates

	A) GENERAL INFORMATON								**B) MAIN BUSINESS ACTIVITY**		
Questions and sub-questions	**1. Cooperative information**		**2. Address**		**3. Contact person**		**4. Contact details**		**1. Main sector**		**2. Sub-sector**
	Name	Establishment (year)	City/Town/Village	Street	Name	Position	Tel.	Email	*Sector*	*if Sector= "Other", specify*	
#1	Qabalan Cooperative For Olive Pressing And Processing	2008	Nablus /Qabalan	Qabalan	Sayel Odeh	Manager	599849830	SayelOdeh@yaho.com	Agriculture/ Agri-food		Agriculture
#2	Urif Agricultural Cooperative	2000	Nablus /Urif	Downtown	Nidal Sabah	Secretary	599766362	-	Agriculture/ Agri-food		Agriculture
#3	Cooperative Society For The Pressing Of Olives And Marketing Of Its Products In Tell	1981	Nablus /Tell	Tell	Bilal Yamin	Manager	598909374	-	Agriculture/ Agri-food		Agriculture
#4	Agricultural Marketing Cooperative Society	1987	Nablus /Beita	Beita	Khudair Muhammad Khudair	Manager	599298974	-	Agriculture/ Agri-food		Agriculture
#5	Asira North Agricultural Cooperative	2010	Nablus /Asira North	Asira North	Qaysar Jawabra	Manager	599340676	JQaysar@hotmail.com	Agriculture/ Agri-food		Agriculture
#6	Beit Forek Livestock Cooperative	2008	Nablus /Beit Forek	Beit Forek	Hamed Hanani	Manager	598515960	-	Agriculture/ Agri-food		livestock
#7	Meithalun Agricultural Cooperative Society	1985	Jenin /Meithalun	Main street	Ali Rabaia	President	568800400	-	Agriculture/ Agri-food		Agriculture
#8	Agricultural Marketing Cooperative Society	1979	Jenin	Industrial Area	Ahmed Salameh	President	599887749	-	Agriculture/ Agri-food		Agriculture

#9	Kafr Dan Agricultural Cooperative Society	1993	Jenin	Kafr Dan	Issam Merhi	President	599112880	-	Agriculture/ Agri-food	Agriculture, livestock
#10	Al-Jalamah Agricultural Cooperative Society	2003	Jenin /Al-Jalamah	Main street	Murad Shaaban	President	599794891	-	Agriculture/ Agri-food	Agriculture
#11	Faqqua Cooperative Society For Sheep Breeders	2004	Jenin	Faqqua	Amer Abu Salha	President	599758368	-	Agriculture/ Agri-food	livestock
#12	Burqin Agricultural Cooperative Society	2007	Jenin/ Burqin	Shuhada Street	Mohamed Mansour	President	599358322	-	Agriculture/ Agri-food	Agriculture
#13	Kafr Ra'i Agricultural Cooperative Society	2008	Jenin /Kafr Ra'i	Southern Street	Issam Sobeih	President	599871148	-	Agriculture/ Agri-food	Agriculture
#14	Al-Yamun Agricultural Cooperative Society	2006	Jenin /Al-Yamun	Al-Yamun	khaled	President	598907819	-	Agriculture/ Agri-food	Agriculture
#15	Arranah Agricultural Cooperative Society	2011	Jenin /Arranah	Arranah	Mohammed Saleh Al-Omari	President	599201032	-	Agriculture/ Agri-food	Agriculture
#16	Misilyah Agricultural Cooperative Society	2012	Jenin /Misilyah	Misilyah	Iyad Abu Al-Rub	President	599374271	-	Agriculture/ Agri-food	Agriculture
#17	Anzah Agricultural Cooperative Society	2012	Jenin /Anzah	Anzah	Hashem Brahma	President	595916827	-	Agriculture/ Agri-food	Agriculture
#18	Al-Judeida Association Cooperative For Agricultural Production	2014	Jenin /Al-Judeida	Downtown	Munshid Zaqzouq	President	595683118	-	Agriculture/ Agri-food	Agriculture

#19	Aaba Association Cooperative For Agricultural Production	2014	Jenin /Aaba	Main street	Bassem Aramta	President	592305257	-	Agriculture/ Agri-food		Agriculture
#20	Marj ibn Amir Cooperative Society For Irrigation	2013	Jenin	Marj ibn Amir	Amjad Abu Farha	President	599844540	-	Agriculture/ Agri-food		Agriculture
#21	Beekeepers Cooperative Association	2016	Jenin	Sikka Street	Ibrahim Mahamid	President	599260533/0569260560	-	Agriculture/ Agri-food		Agriculture
#22	Jalbun Cooperative	2010	Jenin /Jalbun	Jalbun	Siham Abu Al-Rub	President	597219411	-	Agriculture/ Agri-food		Agriculture
#23	Agricultural Cooperative Society - Meithalun	1998	Jenin/ Meithalun	Meithalun	Khalidiya	President	599477239	-	Agriculture/ Agri-food		Agriculture
#24	Meithalun Charitable Society	1985	Jenin	Meithalun	Fayez Muhammad Ali Rabayah	Cooperative member	599827344	-	Other (specify)	Services / Kindergarten	Kindergarten
#25	Methaloun Women's Center	2008	Jenin	Methaloun	Khalidiya Nairat	Cooperative member	599477239	-	Agriculture/ Agri-food		Agriculture
#26	Kafr Dan Cooperative Society for Agriculture and Irrigation	1998	Jenin	Jenin	Mohammed Fahmy	President / chairperson	42443003	-	Agriculture/ Agri-food		Federation of Cooperatives
#27	Cooperative Union for Marketing and Agricultural Development	2019	Nablus	Nablus	yasmeen Dado	Cooperative member	597288885	info@taawony.com	Other (specify)		Federation of Cooperatives
#28	Women's Action Association, Jenin	2010	Jenin	Jenin	Tahani	Manager	599133288	-	Agriculture/ Agri-food		Agriculture
#29	Ryada Cooperative Society for Thyme and Honey	2019	Nablus	Nablus	Suha Asmar	Cooperative member	568676797	riyadicooperative@g			

								mail.com			
#30	Beta Women Development Association	2007	Nablus	Nablus	Basima Dwaikat	President / chairperson	599658149	info@bitawds.org	Handicraft/Manufacturing		Handicraft and Kindergarten
#31	Bazzaria Cooperative Society for Mutual Benefit		Nablus	Nablus	Nawal Raouf Qadi	President / chairperson	599359149	bazzir2009@hotmail.com	Agriculture/ Agri-food		Agriculture
#32	Agricultural cooperative farmers union	1973	Jenin	Jenin	Hafez Abdul Rahim Aliyat	Cooperative member		-	Other (specify)		Farmers Union (Insurance Service)
#33	Canaanite threads	2018	Nablus	Nablus/Rujeib	alaa	Cooperative member	599258199	-	Handicraft/Manufacturing		Handicraft

Annex 2: Regional Economic Outlook: The Northern West Bank Governorates

The governorates are diverse in geography, population size, climate, and economic activity. They also face varying degrees of security threats and transportation obstacles. While some challenges extend beyond the borders of any one governorate, numerous challenges can be categorized as general and apply to most regions.

This section presents the economic realities of each one of **the NWBGs**. Each section will start with an overall brief on the governorate, followed by a description of its major economic sectors, its employment realities and composition of its economic establishments, and its main trading partners and exporting sectors. Each governorate's subsection will list its unique challenges. Finally, the section will conclude with a prioritization of regions according to their level of exposure to conflict and economic disruption.

1. Jenin Governorate Brief

Jenin is the NWBGs Bank with a population of 352,875. The land area of the governorate is 584 km2 and its neighboring governorates are Nablus, Tulkarem, and Tubas. Jenin governorate is dependent on access to Israel for imports (69 percent of total imports) and exports (78.5 percent of total exports) through the Jalameh checkpoint, which has been frequently shut or open in a limited fashion for the last few months. The frequent closing of this checkpoint has impacted the movement of goods as well as the entry of Arab citizens of Israel, who are an important market for producers in Jenin. Furthermore, Jenin is cut off from the rest of the West Bank by two main checkpoints: Deir Sharaf (Nablus) and Dotan (Tulkarem)[59]

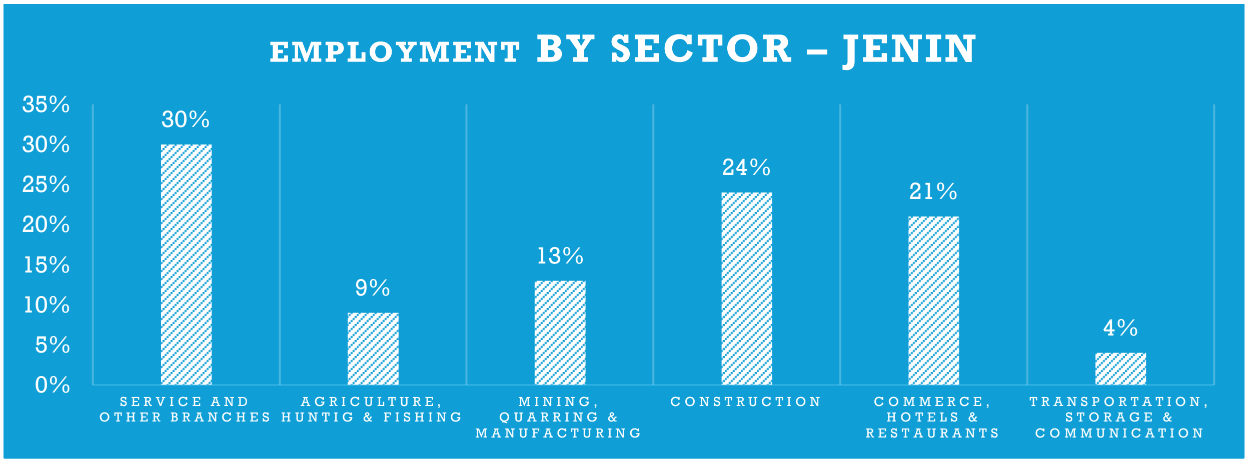
Major Economic Sectors The stone and marble sector, food production, and the agricultural sector are Jenin's most important productive sectors for the economy and employment. Manufacturing and stone and marble mining employs 12.5 percent of the working population of Jenin, the largest of any other productive sector. It also contributes roughly US$19M to Jenin's annual exports. Agriculture's importance extends beyond sheer employment. Not only does it contribute to local consumption, but it also contributes to neighboring governorates' consumption and as an industry input. The largest exporting sector in Jenin remains manufacturing of food products at US$23.5M in 2021, which is partially dependent on Jenin's internal agricultural products[60], and heavy women involvement[61].

Table 47: Employment by Sector – Jenin

[59] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

[60] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

[61] I BID



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Enterprise Composition and Employment: As in the rest of the West Bank, microenterprises make up most firms in Jenin, with 92 percent 64 employing between 1-4 workers. Of the non-agricultural enterprises, the largest segment of microenterprises (313) and SMEs (90) are concentrated within the food manufacturing sector. This is followed by furniture manufacturing, and stone and marble production. The governorate has an unemployment rate of 16.8 percent among labor force participants 15 years and older, one of the highest in the West Bank.

Major Markets: In 2021, imports totaled over US$633M, while exports totaled a little over US$80M. This is equivalent to a 7.9:1 import-to-export ratio, the second highest in the West Bank to Ramallah. The key exporting sectors are as follows:

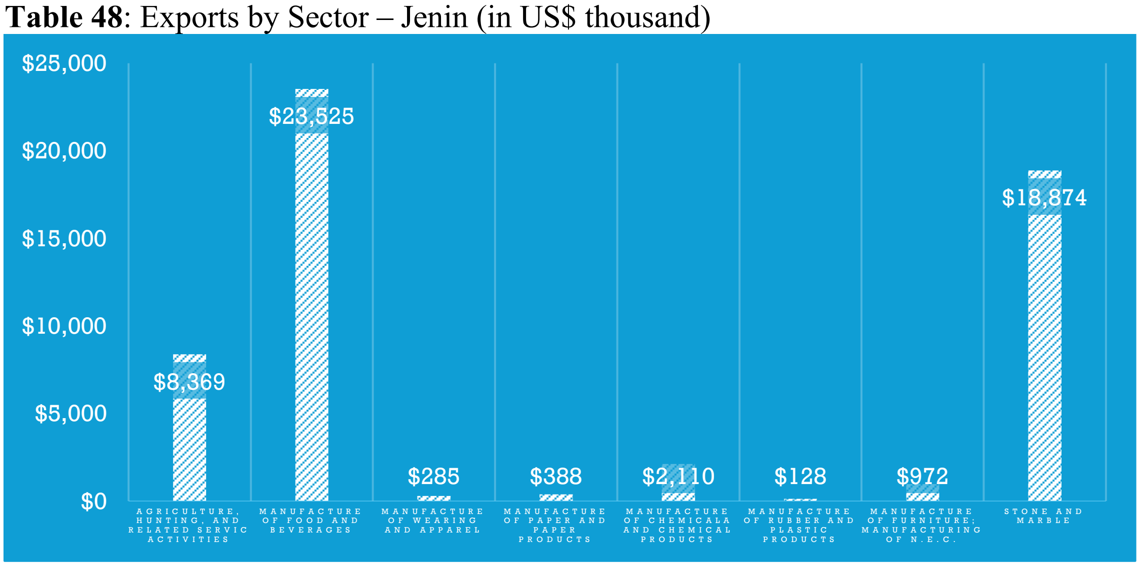
The stone and marble sector exports almost exclusively to Israel (98 percent),

Exports of food products are diversified as the UAE (24 percent) and Jordan (7 percent) make up roughly a third of Jenin's export partners.

In agriculture, Israel accounts for just under 82 percent of Jenin's exports. Other markets include Jordan (5.3 percent), Republic of Korea (3.9 percent), Germany (2.8 percent), Saudi Arabia (1.7percent), and the UAE (1.6 percent).

Garment exports to the Israeli market amount to over US$5.15M, including factories that Israeli apparel companies' contract for manufacturing services.

Table 48: Exports by Sector – Jenin (in US$ thousand)



USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Challenges • Increased military activity and incursions, beyond any other governorate causing disruptions to economic activity and infrastructure damage. • Increased closures of Jalameh crossing and Deir Sharaf and Dotan checkpoints • Increased unemployment due to day laborers' inability to cross the Israeli border. • Shrinking local market due to Arab citizens of Israel inability to access Jenin. • Jenin governorate is dependent on access to Israel for imports (69 percent of total imports) and exports (78.5 percent of total exports). Disruptions to this flow affect the supply of production inputs and market access for outputs of goods[62].

The northern West Bank, and Jenin Governorate in particular, faces the highest poverty and unemployment rates in the West Bank. The governorate was highly dependent on Israel because much of it borders Israel, had strong connections with nearby Palestinian Israeli communities and had little local manufacturing to absorb workers. With the intensification of Israeli closure measures after that time and the construction of the Barrier, which began in 2002, the connections between Jenin Governorate and vital Israeli goods and labor markets have been severed[63].

2. Nablus Governorate Brief

Nablus governorate is strategically situated in the center of the northern portion of the West Bank. Nablus is the second largest governorate in the West Bank after Hebron, 598 km2, with a population of 431,584. It is thus a central trade and manufacturing hub for its smaller neighboring governorates of Tubas, Jenin, Tulkarem, Salfit and Qalqilya. Nablus is heavily impacted by lack of access to the Israeli market as it does not have a commercial checkpoint. Israel typically accounts for 49 percent of total Nablus goods imports and 92 percent of its exports[64].

Entrances into the governorate, especially the city of Nablus, is restricted by four main internal checkpoints: • Hamra Checkpoint • Huwara Checkpoint • Sarra Checkpoint • Deir Sharaf Checkpoint These checkpoints, and other smaller ones across the governorate, restrict the movement of goods and people. They not only hinder the ability of inhabitants to import essential goods, but they disrupt the export of goods and people's access to work inside the city of Nablus or in other parts of the West Bank.

Major Economic Sectors

Nablus is home to many manufacturing enterprises, 2,806, especially in furniture, food products, and wearing apparel. Nablus also has a significant number of chemical product manufacturers that mostly produce soap and hygiene products. Nablus is also home to the largest sector of garments manufacturing services to the Israeli market, which is considered a service export. Dense population, settlements, and settlement roads limit the ability of the agricultural sector and the stone and marble sector to grow.

Commerce remains central to the economic activities within the Nablus governorate due to its position within in the north of the West Bank as well as constant influx of Arab citizens of Israel as tourists and shoppers. Significantly, Nablus is home to Al-Najah University, the largest

[62] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

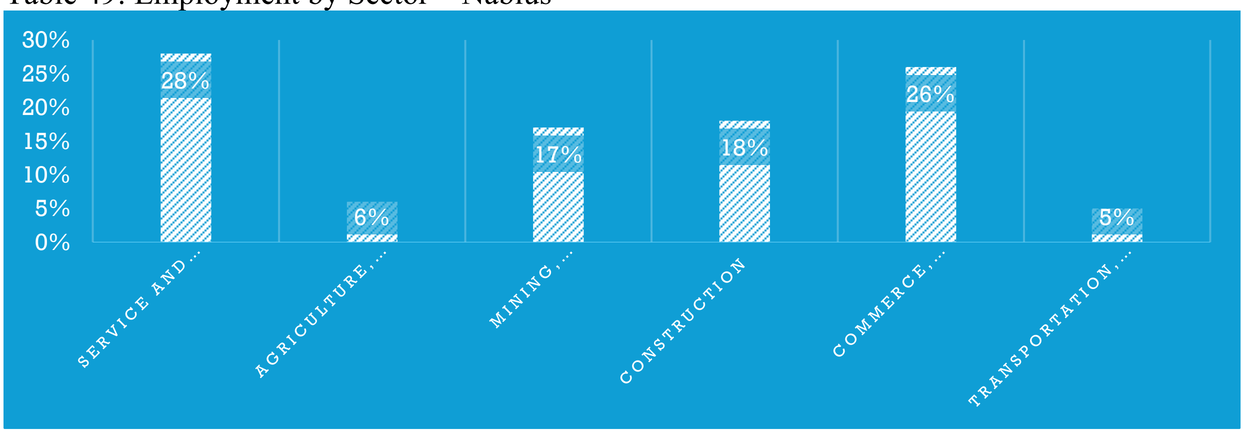
[63] https://www.ochaopt.org/sites/default/files/ochaHU0405_En.pdf

[64] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Palestinian university with over 24,000 undergraduate and graduate students from across the country. This is an additional driver of the commerce and services sectors[65].

Enterprise Composition and Employment The most recent data on firm size at the governorate level (2017) indicate that 88 percent of Nablus's 15,987 establishments employ four workers or less, while the percentage of SMEs is roughly 10 percent of enterprises. Compared to national standards, Nablus is home to more developed businesses than smaller governorates. Nablus has an unemployment rate of 13.8 percent among labor force participants 15 years and older. This is around the average unemployment in the West Bank, despite the influx of workers from other smaller governorates, especially in services and commerce. The ongoing closures of the checkpoints and settler activities around the city of Nablus cause significant disruptions in production and employment. Smaller villages in the governorate depend on the city, and ability to travel to Ramallah, for employment[66].

Table 49: Employment by Sector – Nablus



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

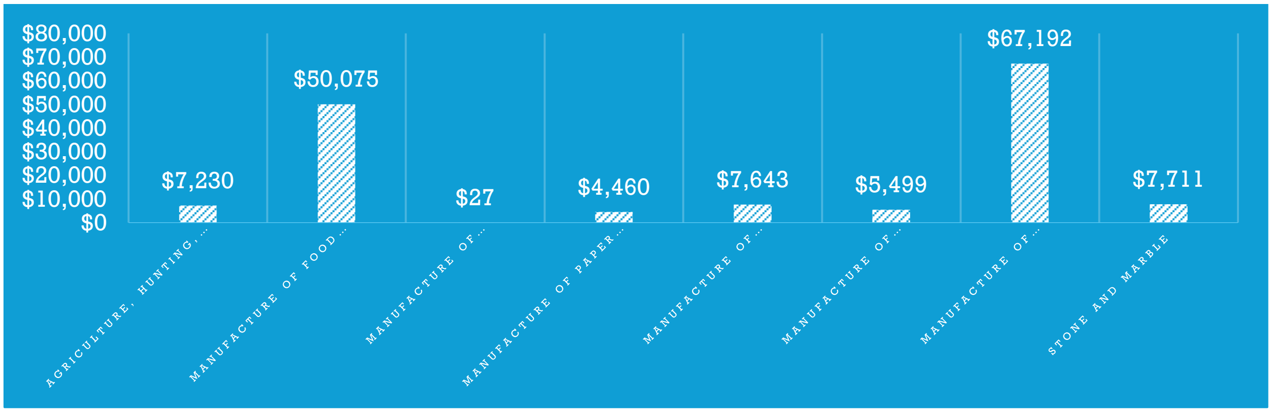
Major Markets As the central WBGs, Nablus relies on production inputs from its neighbors, especially agricultural produce from Jenin, Tulkarem, and Tubas which supplies Nablus's food processing factories and provides fresh produce for local consumption. The centrality of Nablus's position, as well as the governorate's large commercial and manufacturing sector, justify low dependence on Israel for imports. Nablus's manufacturing power is reflected in its contribution to exports which is in some cases solely targeted at the Israeli market. Nonetheless, Nablus remains dependent on imports, which exceed the governorate's exports 4.3:1. The key exporting sectors can be summarized as follows[67]:

Table 50: Exports by Sector – Nablus (in US$ thousand)

[65] An-Najah University. (n.d.). An-Najah National University: Our University at Glance. Www.najah.edu. Retrieved December 4, 2023, from https://www.najah.edu/en/najah-university/

[66] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

[67] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Furniture exports are almost entirely bound for the Israeli market.
Food manufacturing products are more diversified, with 78 percent bound for Israel, 9 percent to Saudi Arabia, and 4.4 percent to Qatar.
Stone and marble production is intended almost exclusively for the Israeli market.
Similarly, over 10 percent of Nablus's chemical products (mostly traditional soaps) are sent to the Jordanian and US markets, while the rest is intended for the Israeli market.
The garment service exports to the Israeli market amount to over US$12.2M.
Challenges • Nablus is dependent on the Israeli market for 92 percent of total exports. • Checkpoints and closures endanger its access to fresh food needs and food production industry inputs, due to dependency on neighboring governorates. • Lack of access for Arab citizens of Israel for whom Nablus is a popular tourist and shopping destination. • Closures and settler activities impact workers access to Nablus and other governorates, including Ramallah[68].

3. Tubas & the Northern Valleys Governorate Brief

Tubas is a governorate situated at the northeastern corner of the West Bank. It is home to 68,779 people and its land area is 409 km^2 in the Jordan Valley, suitable for cultivation. Tubas borders Jenin, Nablus, and Jericho, while bordering Jordan on the East. The governorate is highly rural and dominated by agricultural lands. Tayaseer checkpoint in the northern part of the governorate controls access to a large proportion of Tubas's cultivated lands.

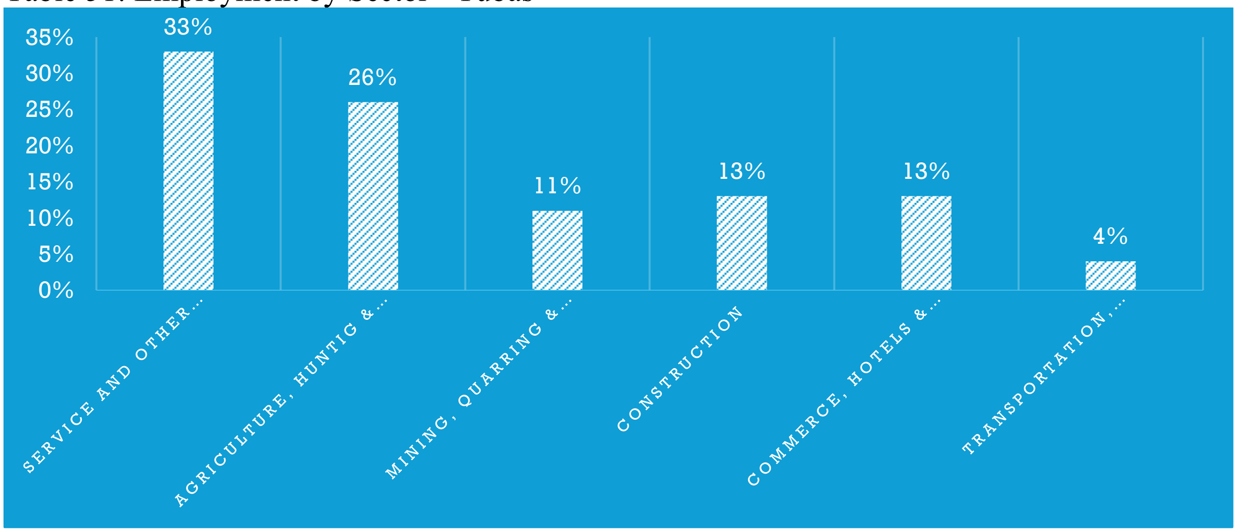
Major Economic Sectors Tubas's economy is dominated by agricultural production. Tubas's agricultural products are directed to either the local food manufacturing sector or to neighboring governorates as fresh produce or as inputs into food manufacturing sectors, especially in Nablus. Notably, much of the agricultural produce from Tubas is directed at the Israeli market as exports[69]. Tubas is also home to a significant stone and marble sector and furniture production[70].

Enterprise Composition and Employment: There are 1,760 economic establishments active in Tubas, 92 percent of which are microenterprises and 7.6 percent are SMEs. Of its total operating economic establishments, roughly 200 (11.4 percent) are concentrated in the manufacturing sector, specifically food production, furniture production, and stone and marble sectors. However, the

[68] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023
[69] No formal data is readily available as to the size of this economic activity. SMART calculated that the agricultural export from Tubas to Israel amounts to roughly 200 tons of produce per day.
[70] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

economy of Tubas is dominated by agriculture. Since these sectors are labor intensive, Tubas has a relatively low unemployment rate at 10.6 percent. Roughly 26 percent of all employed wage earners work in the agricultural sector. Given the small population, access to neighboring markets, and its agrarian economic composition, Tubas's workers make up a relatively small portion of the West Bank's Day laborers who depend on access to Israel for employment.

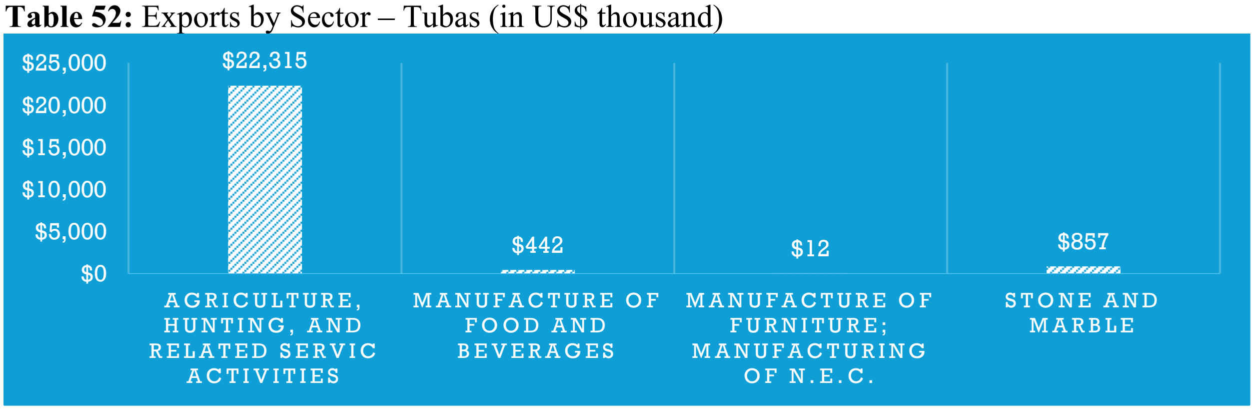
Table 51: Employment by Sector - Tubas



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Major Markets Tubas has one of the lowest dependencies on imports compared to exports, as imports only outpace exports 2.12:1. Tubas' exports are mostly comprised of the following: • Agricultural exports dominate and are mostly exported to Türkiye (26.6 percent), the UK (24.4 percent) and Germany (10.7 percent) • 48.4 percent of Tubas's stone and marble exports target the Kuwaiti market. • 67.4 percent of total food production exports target the Saudi Arabian market[71].

Table 52: Exports by Sector – Tubas (in US$ thousand)



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Challenges • Tubas is dependent on Israel for 92 percent of imports, the majority of which is energy. • Constant closure of checkpoints to other parts of the West Bank, especially Nablus, impacts access to agricultural inputs and markets for the governorate's agricultural products. •

[71] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Closure of Tayaseer, a minor checkpoint within the governorate connecting to agricultural lands, hinders access to the governorate's largest economic activity. • Agricultural production in the governorate is facing difficulty meeting the increased demand from the local and Israeli markets.

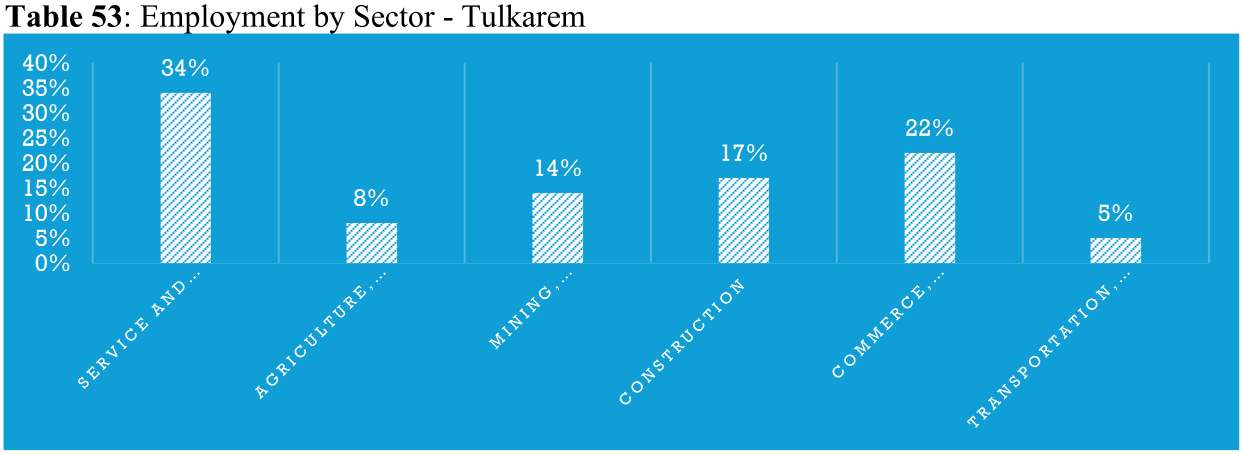
2.10.4. Tulkarem Governorate Brief

The Tulkarem Governorate is a northwestern governorate in the West Bank that is home to 205,946 inhabitants. Its land area is relatively small at 246 km^2 and much of it is dedicated to cultivated land. It borders Jenin, Nablus, and Qalqilya. The city of Tulkarem is also home to the Tulkarem refugee camp. Tulkarem is an easy governorate to surround due to its small land size (third smallest), proximity to the wall, and proximity to Israel. It is also controlled by two critical checkpoints; Innab (access to Nablus); Dotan (access to Jenin) as well as the Sha'ar commercial checkpoint with Israel.

Major Economic Sectors much like other northern governorates, Tulkarem economic activity is centered on agriculture and food production. Fresh produce supplies the local market as well as the needs of neighboring governorates especially Nablus. Much of the agricultural produce from Tulkarem is directed to the Israeli market as exports[72]. Mining and manufacturing employ 14.4 percent of residents, while agriculture employs 8.4 percent of residents of the governorate. Tulkarem is also home to significant furniture production intended for local market consumption as well as stone and marble production for the local market.

Enterprise Composition and Employment There are 7,314 operating economic establishments within the governorate, 91percent of which are microenterprises and 8 percent are SMEs. Manufacturing enterprises total 982 in Tulkarem, the largest sector by number of enterprises in the governorate. The unemployment rate in the governorate is consistent with the average across the West Bank at 13.9 percent.

Table 53: Employment by Sector - Tulkarem



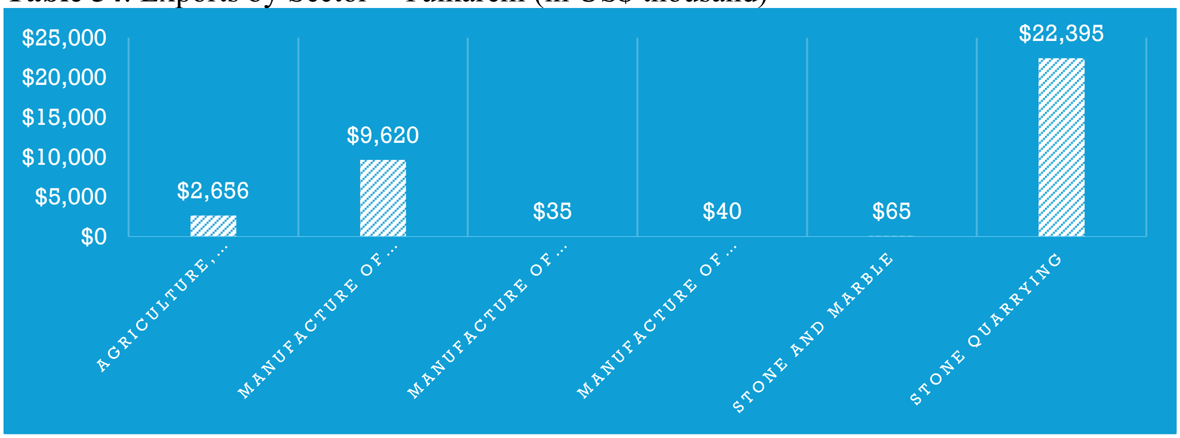
Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Major Markets Tulkarem import to export ratio is relatively high at 6.8:1. Tulkarem is relatively dependent on Israel in imports (55 percent), and exports to Israel (72 percent). The largest exporting sectors are listed below[73]:

[72] No formal data is readily available as to the size of this economic activity. SMART calculated that the agricultural export from Tulkarem to Israel amounts to roughly 150 tons of produce per day

[73] USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Stone quarrying[74] accounts for 56.8 percent of total exports from the governorate, which caters completely to the Israeli market.
Food production which amounts to 24 percent of total exports, of which 26 percent are sent to Kuwait, 22 percent are sent to the UAE 19.7 percent and are sent to Jordan.
Agriculture 71 amounts to 6.6 percent of total exports from the governorate, of which 36.5 percent is bound for Türkiye, followed by the UK (25 percent) and the UAE (14.5 percent).
The garment service exports to the Israeli market amount to over US$8.1M[75].
Table 54: Exports by Sector – Tulkarem (in US$ thousand)



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Challenges • Tulkarem has been badly impacted by IDF military operations causing disruptions to economic activity and infrastructure damage. • Tulkarem is impacted by disruption in the access to Nablus, which is a key market for its agricultural products.

5. Qalqilya Governorate Brief

South of Tulkarem along the West Bank's northwestern border with Israel is the governorate of Qalqilya. The governorate is home to a population of 127,025 and its land area is 165 km2 the contiguity of which is severely hindered. Qalqilya city is almost surrounded by the Wall and Israeli settlements. Movement restrictions are contingent on one critical checkpoint which connects the city of Qalqilya with the rest of the governorate, the West Bank, and the world[76].

Major Economic Sectors Qalqilya economic activities are quite diverse. Economic activity is spread between agriculture, manufacturing, and commerce. Within the manufacturing sector' 647 establishments, over 95 percent are concentrated in the manufacturing of furniture, food products, apparel (garments), and stone and marble.

Enterprise Composition and Employment Qalqilya has almost 4,000 operating economic establishments within the governorate, over 90 percent of which are microenterprises while 8

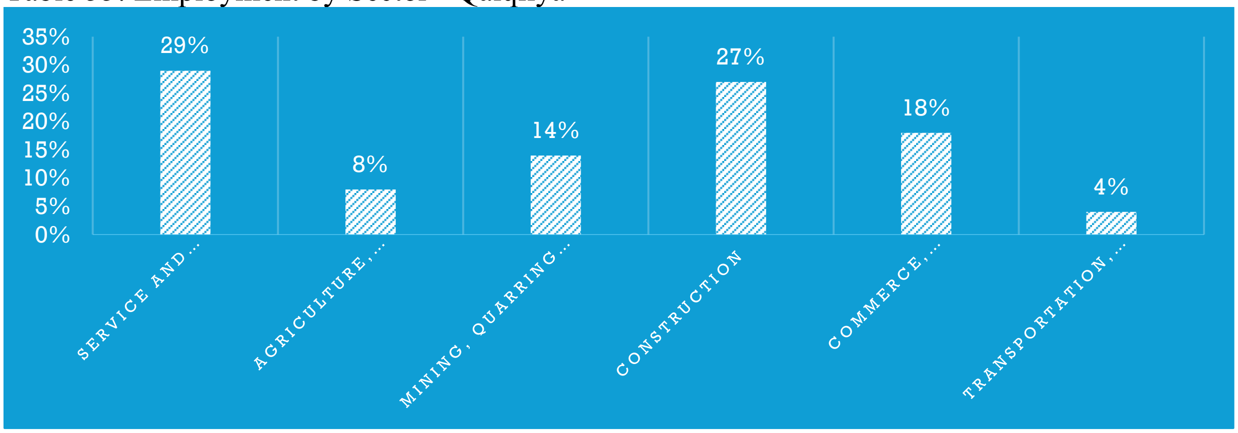
74 Stone quarrying, different from stone and marble mining, involves the production of construction material by breaking stone into smaller pieces and components. Israel's construction market depends on imports from the West Bank in the sector almost completely.

75 USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

76 USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

percent are SMEs. The manufacturing sector contains primarily micro sized producers of furniture and food products. Notably textiles and garments manufacturing enterprises are more diverse in size, with a high concentration of SMEs (36 percent). Qalqilya unemployment stands at 11.5 percent, comparatively lower than its neighbor to the north. Notably, around 8 percent of the governorate's employment is in the agricultural sector (higher than the national average), while over 14 percent are employed in the manufacturing and stone and marble sectors.

Table 55: Employment by Sector - Qalqilya



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Major Markets Qalqilya import to export ratio stands at 5.5:1. 71percent of total imports into Qalqilya and 89 percent of all its exports depend on Israeli markets. Unlike the rest of the West Bank, Qalqilya garment industry is not a large exporter and is intended for the local market. The largest exporting sectors are[77]:

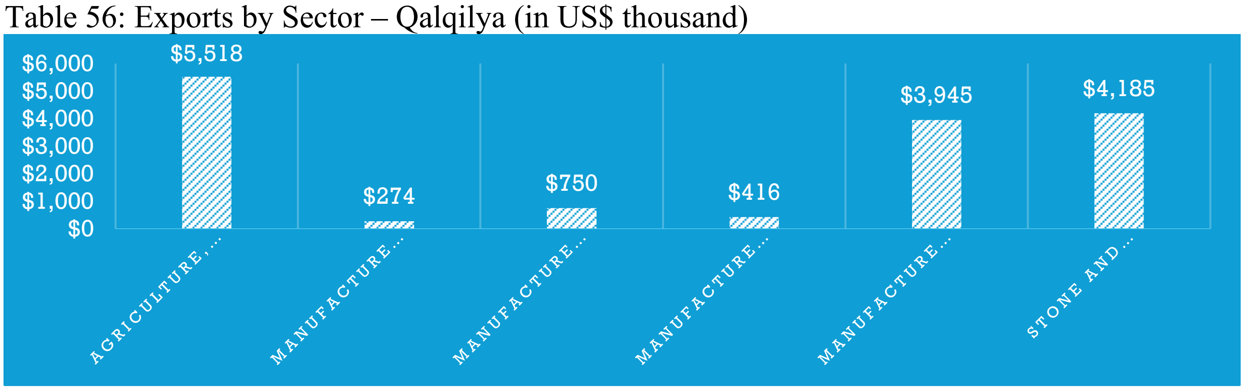
Agriculture, accounting for 27 percent of the governorate's total exports, 35 percent of which are sold in the Jordanian market.

Stone and marble (20 percent), exported almost completely to the Israeli market

Furniture manufacturing (19 percent), almost completely to the Israeli market.

Garment service exports to the Israeli market amount to around US$1.6M

Table 56: Exports by Sector – Qalqilya (in US$ thousand)



[77]USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023
Challenges • Frequent closures and the lack of other outlets make the governorate of Qalqilya exceptionally vulnerable. • Heavy dependence on the Israeli market, including Arab citizens of Israel as visitors and shoppers, which is impacted by closures.

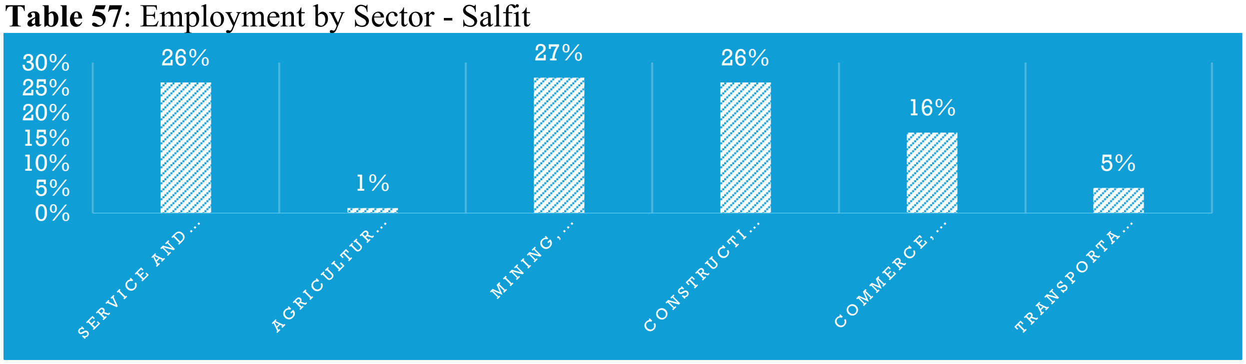
6. Salfit Governorate Brief

Situated on the northwestern border between Qalqilya and Ramallah, Salfit governorate has a population of 85,902. The governorate's land area is 204 km2 and is severely impacted by settlement expansion.

Major Economic Sectors Salfit's small physical size as well as the expansion of settlement activity in the governorate helps explain its economic make-up. Unlike its immediate northern neighbors, agriculture does not play a major factor in the economy of the governorate. Similarly, Salfit's largest economic sectors are stone and marble mining and manufacturing, especially furniture and food production.

Enterprise Composition and Employment The governorate has 552 manufacturing enterprises, with a relatively high concentration of furniture producers. Salfit's firm size distribution is like the rest of the West Bank. 89 percent of all establishments are microenterprises and roughly 10 percent are SMEs. However, this trend is less pronounced in food production, as 30 percent of the establishments are SMEs, and garment manufacturing, with 41percent SMEs. Salfit's unemployment is at 13.1percent. 27.1 percent of all employed wage earners work in mining and manufacturing, while less than 1 percent work in agriculture—the lowest percentage in the West Bank.

Table 57: Employment by Sector - Salfit



Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Major Markets Salfit's import to export ratio is 2.9:1, meaning they have a more favorable trade balance than their neighbors to the north. Their main exports are as follows (Exhibit 22):
Furniture accounts for 39 percent, nearly all of which goes to Israel.
Food products make up the second largest export category (15 percent) with the two largest importers being the UAE (44 percent) and Kuwait (33 percent)

Table 58: Exports by Sector – Salfit (in US$ thousand)

Source: USAID, IMPACT OF THE GAZAWAR ON SMES IN THE WEST BANK, Small and Medium Enterprise Assistance for Recovery and Transition (SMART) Project, November 2023

Challenges • Movement is subject to settler-controlled routes, which engulf the governorate's access points to Ramallah and Nablus. • Settlements and settler roads limit agricultural production.

This regional context is affecting women economic-empowerment and participation: **Gender-Disadvantages in endowments-**assets-ownership-jobs-level of salaries-skills and experience-networks-and social capital. **External-constraints**-legal system-financial discrimination-social norms-and family and social responsibilities **Internal-constraints**-low self-confidence -reluctance to seek credit-perceived lack of opportunities-and perceived hostile-environment[78]

[78] **Kufur Dan, Birqin, and Salfit** have unstable socio-economic environment, characterized by: severe women and youth unemployment and business opportunities leads to conflict and brings violence into the households. **Most FDGs participants also acknowledged that women are often the victims of economic insecurity in Jenin and Salfit**. Violence against women often has economic root, where women are often the first victims of poverty. The desire of women for financial independence and decision-making, market and informational network, availability of operational capital, knowledge and skills and responsibility towards children and culture constraints, are the main factors that impact women's decision develop their businesses. Most enterprises started by women are small and consumer oriented business.

Annex 3: Barriers to Female Labor Force Participation and Employment.

Such barriers are myriad, entrenched in social norms, and implicit in some laws and regulations, even as protections remain insufficient. While the removal of regulatory barriers to formalize home-based businesses in the new companies' law should increase formal female employment, other barriers remain. Social patriarchal norms define jobs that are socially acceptable and appropriate for women, support unfavorable views on employment of women in mixed gender environments, and reinforce stereotypes and biases against women's managerial and leadership skills[79].As such, they represent significant barriers to women's wage employment and entrepreneurship. Only 1 percent of members of the Board of Directors of the Chambers of Commerce, Industry and Agriculture are women, and only 2 percent of directors of companies listed on the Palestinian capital market are women[80]. **Persistent gender wage gaps discourage women from seeking employmen**t. While the labor law explicitly prohibits discrimination between men and women, it also restricts female employment and prohibits women from i) dangerous or hard work as defined by the Minister of Labor, ii) extra working hours during pregnancy and during the first six months after delivery, iii) work during night hours except as defined by the Council of Ministers. The law does not include any clear definition of discrimination and does not provide protection for women against sexual harassment. Moreover, it does not mandate equal pay across genders, nor does it require employer provision of childcare for working parents.[81]

About two third of women (15 years and above) work as technicians, specialists, and clerks, while the remaining one third of them is distributed on other remaining occupations. These data in the below table shows the poor distribution within the various activities, and the gap between men and women.

Table59 : Percentage Distribution of Employed Individuals (15 Years and above) by Region, Occupation and Sex, 2023

Occupation	Sex	
	Females	Males
West Bank		
Legislators, Senior Officials & Managers	3.6	3.3
Professionals, Technicians, Associates & Clerks	63.5	17.8
Service & Sales Workers	15.2	17.2
Skilled Agricultural & Fishery Workers	4.5	3.1
Craft and Related Trade Workers	4.0	26.3
Plant & Machine Operators & Assemblers	2.3	11.3
Elementary Occupations	6.9	21.0
Total	**100**	**100**

*Data for the West Bank represent the full year 2023, while data for Gaza Strip represent only the first three quarters of 2023.

Source: Palestinian Central Bureau of Statistics, 2024. Data base of Labor Force Survey 2023. Ramallah-Palestine.

79 World Bank (2018) Enhancing Job Opportunities for Skilled Females in the Palestinian Territories

80 PCBS, Women and Men in Palestine - Issues and Statistics, 2022.

81 IMF, April 14, 2023, WEST BANK AND GAZA SELECTED ISSUES Approved By Middle East and Central Asia Department Prepared By Karen Coulibaly, Jiayi Ma, and Hania Qassis.

Most women and men are wage employees, with a gap between them. The percentages of female wage employees are higher than the percentages of males. The same applies to those who work as unpaid household members, while male self-employed workers and employers have higher percentages than those of females.

Table 60: Percentage Distribution of Employed Individuals (15 Years and above) by Employment Status and Sex and, 2023

Employment Status	**Sex**	
	Females	**Males**
West Bank		
Employer	2.1	**7.6**
Self Employed	11.8	**19.3**
Wage Employee	77.8	**69.3**
Unpaid Family Member	8.3	**3.8**
Total	100	**100**

Data for the West Bank represent the full year 2023, while data for Gaza Strip represent only the first three quarters of 2023.
Source: Palestinian Central Bureau of Statistics, 2024. **Data base of Labor Force Survey 2023. Ramallah-Palestine.**

Legal developments and alignment with international frameworks: No progress was reported in unifying the outdated and fragmented legal systems in Gaza and the West Bank to provide equal protection under the law, in line with the Convention (paragraph 15(a) of CEDAW Concluding Observations). The fragmented legal context poses a major obstacle to the alignment of national laws with CEDAW82.
To mark the twenty-fifth anniversary of the Beijing Declaration, a study entitled "National Report on Beijing+25: Accomplishments, Challenges and Procedures" was prepared by the Palestinian Ministry of Women's Affairs, with the active engagement of the General Union of Palestinian Women (GUPW) and issued in April 2019. The national report highlighted the following five main priorities to accelerate women and girls' advancement in the next five years: reducing violence against women; increasing women's participation in decision-making; institutionalizing gender equality and parity in official institutions; promoting women's economic participation; and improving the quality of life of disadvantaged and marginalized households[83]. Finally, according to the World Bank, the State of Palestine scores lowest worldwide (26.3 out of 100) in laws and regulations that affect women's economic opportunities and labor force participation, including freedom of movement, laws affecting women's decisions to work, women's pay, women's work after having children, constraints related to marriage, property and inheritance, regulations affecting women starting and running a business, and laws affecting the size of a woman's pension[84].

[82] Economic and Social Commission for Western Asia (ESCWA), 2023, Social and economic situation of Palestinian women and girls July 2020–June 2022, E/ESCWA/CL2.GPID/2023/TP.3
[83] Economic and Social Commission for Western Asia (ESCWA), 2023, Social and economic situation of Palestinian women and girls July 2020–June 2022, E/ESCWA/CL2.GPID/2023/TP.3
[84] World Bank, 2022, p. 1.

Annex 4: Key Messages

Agricultural Value Chain interventions, such as market integration strategies, negotiating better prices and developing new and more profitable products are important mechanisms to increase farm incomes.

While women play a critical role in agriculture, power dynamics and sociocultural norms often restrict their participation to parts of the agricultural value chain that have the least economic returns, such as agricultural labor, petty trading and subsistence farming.

Evidence indicates VC interventions are successful at improving women's incomes, assets holdings, productivity and savings. However, this economic advancement is not enough to translate into non-economic empowerment, such as altering gender roles and removing cultural barriers within families and communities.

Gender-sensitive and gender-responsive VC interventions can promote equitable participation in agricultural markets: Agricultural interventions have been used to increase farmers' incomes by raising farm productivity through new farming technologies and greater access to inputs such as mechanization, finance, advisory and business development services, and favorable institutional environments. Agricultural VC interventions that target different stages, from production to final disposal, have become increasingly popular ways to strengthen the economic position of farmers.

But sociocultural norms also influence AVC, impacting the fair distribution of resources, benefits and access to opportunities among women and men. Gender-sensitive and gender-responsive VC interventions can promote equitable participation of women and men in agricultural markets, helping overcome barriers to engagement in different value chain processes and economically empower women.

Agricultural VC interventions enhance women's economic position, but fall short of other empowerment goals: Generally, agricultural VC interventions are successful in empowering women and strengthening their economic position by having a positive effect on women's incomes, assets holdings, productivity and savings. But improving women's economic conditions does not always translate into improving women's decision-making power, workload and leisure time, mobility or opportunity for leadership positions. **Interventions are unable to significantly alter gender roles within families and communities and cultural barriers tend to persist alongside economic advancements**.

Targeted interventions scored well in other empowerment indicators: Interventions specifically targeted towards women do not produce significant economic impact, but they do improve women's time use (such as reducing the burden of their time on work and increasing the time available for leisure) and other dimensions of empowerment. Targeted interventions allow women to benefit from improved participation, leadership, mobility and decision-making.

Specific factors facilitate or hinder women's participation in AVC: Women's membership in various associations, cooperatives, enhance their access to networks, market linkages, peer-support and, in general, provide a more inclusive environment for women to engage in value chains. The gendered nature of cropping and cultivation ensure women are involved in certain specific value-chain processes. Apart from sociocultural barriers, women are also deterred by lack of time; unequal household workload; high levels of illiteracy; distance to cooperatives and markets; and complexity in accessing land, social capital and better market prices. In addition, state policies, political climates and religious ideologies are also often barriers for women's participation in the agricultural value chain.

Women benefit from VC interventions: Capacity-building; formation of women's cooperatives, and women's associations; better market access, linkages and infrastructure; and increased control over assets, especially land, are some important factors in facilitating better gains for women from agricultural value chain interventions.

Limitations of the evidence: Impacts of AVC interventions on men and women are not always separately reported and analyzed, which hampers effective analysis of their differential impact based on gender. Additionally, effects on certain indicators of women's empowerment, such as workload and time for leisure, are rarely reported.

The total population in the State of Palestine in mid-2023 was about 5.48 million; of which 2.78 million males and 2.70 million females. The total number of populations in the West Bank was 3.25 million, of which 1.65 million males and 1.60 million females. According to the PCBS (2025) Palestine is experiencing an economic, humanitarian, environmental, social educational and food catastrophe, which has held to a contraction in the productivity base and a structural distortion in its economy. By the end of 2024, estimates indicate an unprecedented sharp contraction in the GDP of the Gaza Strip, with a decrease exceeding 82 percent, along with a rise in the unemployment rate to 80 percent. This contraction has also affected the economy of the West Bank, where GDP declined by more than 19 percent and the unemployment rate rose to 35 percent. In total, these factors have contributed to a 28 percent decline in the Palestinian economy, along with a rise in the employment to 51 percent. Moreover, a decline in the trade volume form and to Palestine in 2024[85]. The volume of trade exchange between Palestine and the outside world witnessed an 11 percent decline. The value of export of goods and services from Palestine dropped by 11 percent, totaling USD 9.069 million in 2024 compared to the previous year. Palestine suffers from high levels of unemployment rates and a regional gap. During 2024, the unemployment rate in Palestine rose to 51 percent (35 percent in the West Bank, and 80 percent in the Gaza Strip)[86].

[85]The Palestinian Central Bureau of Statistics (PCBS) and Palestine Monetary Authority (PMA). The Performance of the Palestinian Economy for 2024, and Economic Forecasts for 2025 https://www.pcbs.gov.ps/site/512/default.aspx?lang=en&ItemID=5905

[86] The Palestinian Central Bureau of Statistics (PCBS) and Palestine Monetary Authority (PMA). The Performance of the Palestinian Economy for 2024, and Economic Forecasts for 2025 https://www.pcbs.gov.ps/site/512/default.aspx?lang=en&ItemID=5905