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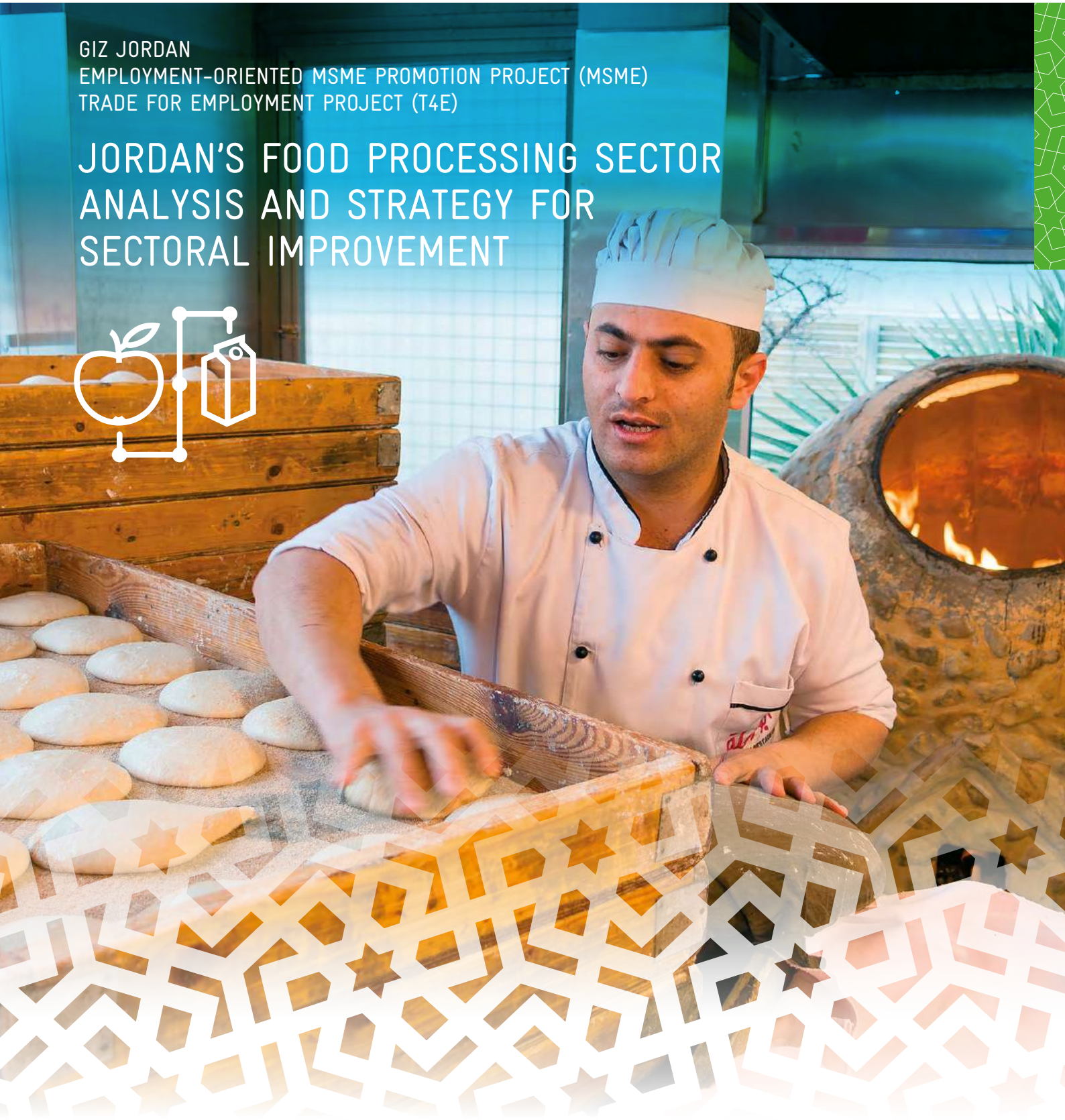
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Kingdom of the Netherlands

MINISTRY OF INDUSTRY, TRADE AND SUPPLY
THE HASHEMITE KINGDOM OF JORDAN

GIZ JORDAN
EMPLOYMENT-ORIENTED MSME PROMOTION PROJECT (MSME)
TRADE FOR EMPLOYMENT PROJECT (T4E)

JORDAN'S FOOD PROCESSING SECTOR ANALYSIS AND STRATEGY FOR SECTORAL IMPROVEMENT



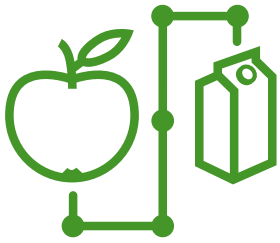
Authors: Mrs Lina Hundaileh, Mr Fadi Fayad

Published in May 2019


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PEANUTS

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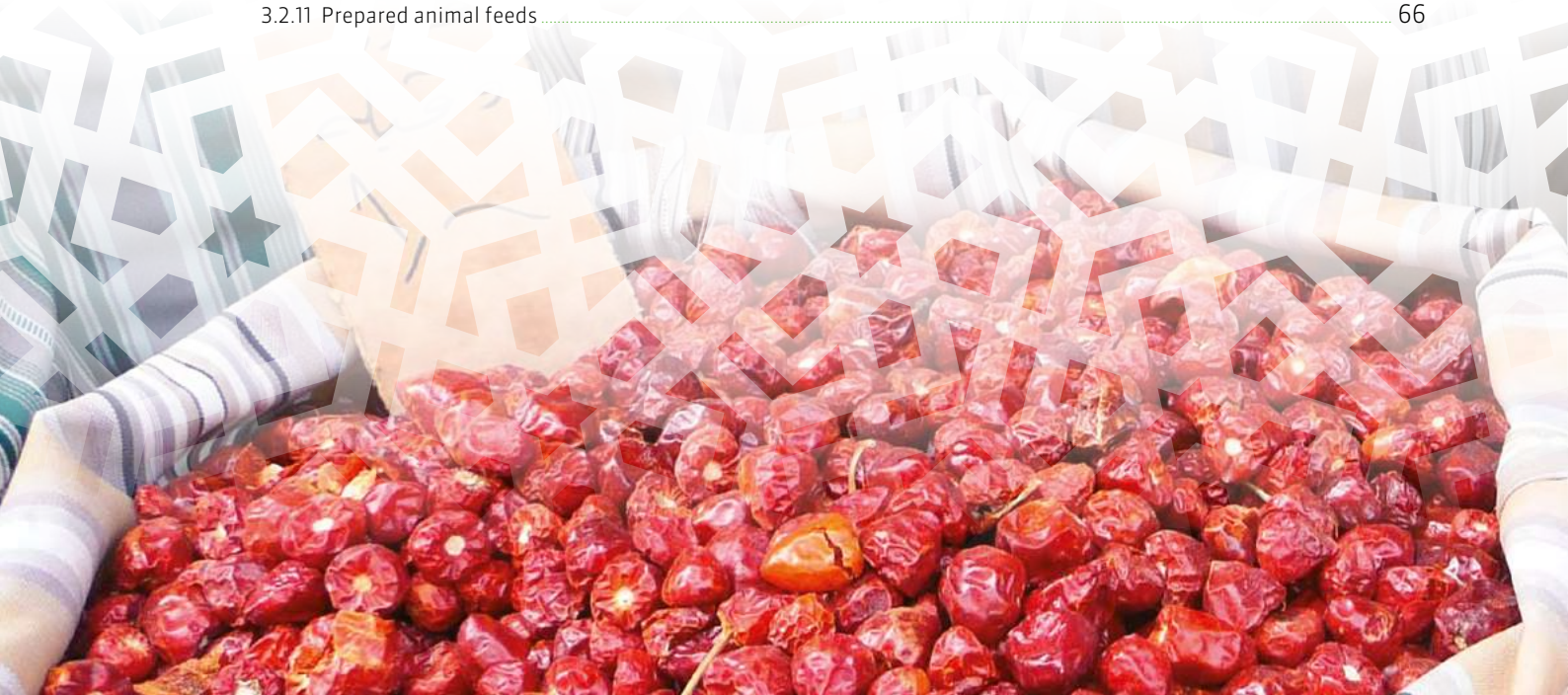
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ABBREVIATIONS

ACI.....Amman Chamber of Industry

BDS.....Business Development Services

BRCGS...British Retail Consortium Global Standard for Food Safety

CBJ.....Central Bank of Jordan

CCD.....Controller Companies Department

CEO.....Chief Executive Officer

CoI.....Chambers of Industry

DoS.....Department of Statistics

EU.....European Union

E-TVET...Employment-Technical and Vocational Education and Training

F&V.....Fruits and Vegetables

FAO.....Food and Agriculture Organization of the United Nations

FSSC.....Food Safety System Certification

FTA.....Free Trade Agreement

GAM.....Greater Amman Municipality

GDP.....Gross Domestic Product

GIZ.....Deutsche Gesellschaft für Internationale Zusammenarbeit

GMP.....Good Manufacturing Practice

GNI.....Gross National Income

GoJ.....Government of Jordan

HACCP...Hazard Analysis of Critical Control Points

HBBs.....Home-Based Businesses

HCST.....Higher Council for Science and Technology

HS.....Harmonised System

ICM.....Integrated Crop Management

ICT.....Information and Communication Technology

IPM.....Integrated Pest Management

ISRDF.....Industrial Scientific Research and Development Fund

IFC.....International Fire Consultants

ILO.....International Labour Organization

ISIC.....International Standard Industrial Classification

ISO.....International Organization for Standardization

ITC.....International Trade Centre

JADE.....EU Jordanian Action for the Development of Enterprises

JCI.....Jordan Chamber of Industry

JEA.....Jordan Exporters Association

JEDCO....Jordan Enterprise Development Corporation

JOD.....Jordanian Dinars

JQM.....Jordan Quality Mark

JSMO.....Jordan Standards and Metrology Organization

KSA.....Kingdom of Saudi Arabia

ME.....Middle East

MENA....Middle East and North Africa

MFI.....Micro-Finance Institution

MFN.....Most Favoured Nation

MoA.....Ministry of Agriculture

MoFA.....Ministry of Foreign Affairs

MoITS....Ministry of Industry, Trade and Supply

MoPIC....Ministry of Planning and International Cooperation

MoU.....Memorandum of Understanding

MSME....Micro, Small and Medium Enterprises

NGO.....Non-Governmental Organisation

NSB.....National Standardisation Body

PPD.....Public–Private Dialogue

PPP.....Public–Private Partnership

QIZ.....Qualifying Industrial Zones

R&D.....Research and Development

RCA.....Reachable Comparative Advantage

RTE.....Ready-To-Eat

SME.....Small and Medium Enterprises

SPS.....Sanitary and Phytosanitary

SWOT.....Strengths Weaknesses Opportunities Threats

TVET.....Technical and Vocational Education and Training

T4E.....Trade for Employment

UAE.....United Arab Emirates

UHT.....Ultra-High Temperature

UK.....United Kingdom

UNDP.....United Nations Development Programme

UNIDO...United Nations Industrial Development Organization

US.....United States of America

USD.....US Dollar

WTO.....World Trade Organization

EXECUTIVE SUMMARY

The GIZ Employment-oriented MSME Promotion Project (GIZ-MSME) aims to support Jordanian micro, small and medium enterprises (MSMEs) in line with national strategies by focusing on food processing, among others, as a sector with considerable growth and employment potential. More specifically, the project aims at improving enterprise competitiveness, enhancing competences within MSMEs and improving the business and investment climate in selected sectors. The GIZ Trade for Employment Project (GIZ-T4E) focuses on building capacities and strengthening structures in a sustainable manner to enhance the conditions of Jordanian companies to increase their trade performance for employment.

Conducted under the auspices of both these projects, this study aimed to provide a general overview of the food processing sector and sub-sectors in terms of structure and market trends, major challenges and opportunities for development and growth. It was carried out in close consultation with relevant stakeholders, drawing on previous work done in the area.

FOOD PROCESSING SECTOR OVERVIEW

The food processing sector affects human health directly, whether in terms of nutrition or in terms of food hazards. Medium and small companies can only grow well and be sustainable if their human resources are well trained and educated on food safety measures and laboratory testing. Although it is a highly regulated sector regularly monitored by the Jordan Food and Drug Administration (JFDA), the sector is composed of a large number of informal small businesses – home businesses, farm businesses or small shops selling dairy products, Arabic sweets, jams, pickles, etc. – mostly distributed around Amman and in the governorates. Discussions with food processors show there is a definite tendency to hire more women in certain activities requiring patience and intensive manual work, as well in quality control activities.

Through its 11 sub-sectors, in addition to fresh produce and animal husbandry, the processed food sector employed around 49,935 workers in 2017. Its revenues in 2016 were JOD 4.112 billion, representing 6.3% of the gross domestic product (GDP). In 2017, the sector's exports were JOD 524.8 million, representing 10.2% of Jordan's total industrial exports. Its current importance is linked to the fact that it is highly diversified, including all sizes of businesses; more than 95% are MSMEs, 80% of which are micro and small enterprises. Its importance is also derived from its forward and backward linkages in the economy, its degree of integration and the added value generated as a result of these linkages. The sector represents 25.9% of the net added value within Jordan's industrial economy. Hence, it has become a strategic sector both in industry and agriculture.

FOOD PROCESSING SUB-SECTORS' DEFINITION

The study based its sub-sector classification on ISIC REV 4, which outlines 11 sub-sectors and hundreds of products: 1: Processed and preserved meat; 2: Dairy products; 3: Processing and preserved fruits and vegetables; 4: Bakery and Arabic sweets; 5: Animal and vegetable fats and oils; 6: Products from the milling industry; 7: Cocoa, chocolate and sugar confectionery; 8: Processed fish and crustaceans; 9: Macaroni and pasta products; 10: Other food products; 11: Animal feed. Within this framework, three priority sub-sectors were selected to be analysed in more detail based on specific criteria:

- Processed fruit and vegetables;
- Dairy products; and
- Arabic sweets (within Bakery products).

The selection criteria, described on page 7 of the report, are basically linked to the capacity for employment, growth and innovation and the potential for employment of women. Other food processing sub-sectors were also analysed in different levels of detail depending on their importance. The analysis followed a value chain approach analysing all stages from supply to market access.

FOOD PROCESSING-SECTOR GROWTH AND EXPORT TRENDS

Average annual growth (turnover) for the main sub-sectors was around 4.9% between 2013 and 2017, mainly attributed to the increase in households and the Syrian refugee population. In terms of market access, certain Jordanian products are gaining ground on the domestic level and in many cases are fully replacing imports, for example in dairy products, Arabic sweets and some processed fruits and vegetables such as dried dates. In terms of food exports, certain indicators show that Jordan has not yet exhausted its market potential, and some sub-sectors are growing



at a regular pace and reaching new Western markets, for example in the Arabic sweets and processed fruit and vegetable sub-sectors, and in ready-to-eat food. The drastic loss of market share in close markets such as Iraq and Syria due to regional political instability is being compensated by other Arab markets, such as the Gulf Cooperation Council (GCC) countries, in many priority sub-sectors and in the processed meat sub-sector. Nevertheless, the regional Arab market remains Jordan's main export market, accounting for over 75% of its processed food exports. The remaining 25% is mainly shared between North America and Europe.

MSMEs' KEY CHALLENGES IDENTIFIED

The findings of the study showed that the main cost drivers negatively affecting the competitiveness of all the food sub-sectors were: raw materials; cost of utilities such as energy and water; and economies of scale. Raw materials were often imported, which had a relatively high negative influence, and scarcity of utilities was highly negatively influential. Negative influence of economies of scale was relatively small compared to regional counterparts. It was also found that small and informal enterprises operating in the sub-sectors also face other challenges at production level, such as lack of skilled labour, reliance on traditional methods, absence of international certification, low involvement of women, and lack of professional hygiene standards. At the trade level, strengthening product diversification, supporting new products and increasing reliance on marketing tools can overcome some of the barriers to export.

In addition to government bureaucracy and a weak enabling business environment, other challenges include lack of skills and low knowledge transfer, weak links between industry and research, and insufficient access to finance. These challenges could be tackled through capacity building measures among MSMEs and supporting institutions, such as Business Development Services (BDS) and chambers. A detailed SWOT analysis was also developed.

STRATEGIC OPTIONS FOR PROMOTING MSMEs IN THE FOOD PROCESSING SECTOR

The report sets out certain strategic interventions to tackle some of the challenges for the improvement of the sector's competitiveness. These are: promoting product development through innovation; modernising industry processes through advanced technologies and methodologies; providing easier pathways for companies – inclusive of micro-enterprises – to obtain financial loans quickly; supporting linkages between academia and industry to enhance applied research; supporting linkages between small and large businesses to create constructive synergies in terms of new product development and market access; and fostering public-private dialogue (PPD) in the fields of export promotion and research.

1 INTRODUCTION



1.1 CONTEXT

The Jordanian economy is currently facing a number of challenges. This is reflected among other things by a negative trade balance, weak business growth and an increasing rate of unemployment. The latest official statistics indicate an unemployment rate of 18.6% by the end of 2018[1]. At the same time, Jordan's economic growth remains low, 2.0% gross domestic product (GDP) in 2018[2], and is not creating enough job opportunities. In 2016, only 49,000 job opportunities were created while the number of job seekers grew by more than 100,000[3].

Nevertheless, Jordan's private sector provides opportunities for growth, innovation and employment. In this context, Jordanian micro-, small and medium enterprises (MSMEs) play a crucial role in the local economy and in employment creation. The country has more than 156,000 registered businesses, of which 98% employ fewer than 20 people. These businesses account for 40% of Jordan's GDP and employ between 60 and 70% of those employed in the private sector[4].

Despite the importance of MSMEs in the local economy, these enterprises are often not in a position to compete with foreign companies, partly due to a lack of qualified personnel, as well as to limited access to finance and business development services (BDS). Moreover, administrative, legal and regulatory obstacles make it difficult to establish new enterprises and to invest in MSMEs.

As a response to these economic circumstances, the creation of conditions for increased private investment and improved competitiveness remains of central importance for Jordan to stimulate employment-oriented growth. These priorities are clearly addressed in the government documents "Jordan 2025 – A National Vision and Strategy" and "Jordan Economic Growth Plan 2018–2022".

Towards addressing these priorities, the German Federal Ministry for Economic Cooperation and Development (BMZ) commissioned a collaboration between the GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) Employment-oriented MSME Promotion (GIZ-MSME) and the GIZ Trade for Employment (GIZ-T4E) projects and the Jordanian Ministry of Industry, Trade and Supply (MoITS) as the political partner.

The GIZ-MSME project aims to support Jordanian MSMEs in line with national strategies by focusing on food processing, information and communication technology (ICT) and tourism as sectors with considerable growth and employment potential. The project supports the implementation of sectoral and market strategies to boost the prospects of MSMEs and the sectors altogether. More specifically, the project aims at improving enterprise competitiveness, enhancing the competences within MSMEs and improving the business and investment climate in the selected sectors.

The GIZ-T4E project focuses on building capacities and strengthening structures in a sustainable manner to enhance the conditions of Jordanian companies to increase their trade performance for employment. It assists the private sector with shaping general conditions conducive to trade by developing negotiating capacities of chambers of commerce and trade associations, and by institutionalising dialogue with the government. It also seeks to improve availability and quality of demand-driven trade-related services alongside identifying existing barriers to trade, developing action plans for facilitating export procedures and reducing trade costs, in line with the World Trade Organization's (WTO) Trade Facilitation.

1.2 SCOPE AND METHODOLOGY OF STUDY

To provide all sector stakeholders with a solid basis for designing and implementing effective measures to boost the growth opportunities in the food processing sector, this study was conducted under the auspices of the GIZ-MSME and GIZ-T4E projects in close consultation with sector stakeholders. It aims to provide a comprehensive understanding of the sectoral structure and current and projected trends, as well as challenges and opportunities for improved competitiveness domestically and abroad.

For the purpose of this study, MSMEs are categorised by their number of employees as micro (1–4), small (5–19) or medium (20–99). This is in line with the definitions used by the Department of Statistics (DoS) of Jordan, the World Bank's small and medium enterprises

1 DoS (2019).

2 Ibid.

3 Ibid.

4 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (2017): Employment Promotion Programme (EPP) Jordan – Economic Trends in Jordan's Local Job Market.

(SMEs) database, the Central Bank of Jordan (CBJ) and the Jordan Enterprise Development Cooperation (JEDCO).

The sector analysis focused on:

- Providing a thorough quantitative and qualitative description and analysis of the sector's performance, trends and potentials.
- Defining all relevant sub-sectors and suggesting priority sub-sectors that are the most promising for increased competitiveness.
- Studying the labour market needs, trends and growth potential of the sector and its sub-sectors in order to identify specific economic opportunities to boost employment.
- Identifying the underlying policy and institutional issues that affect the sector's and sub-sectors' domestic and international competitiveness.
- Providing strategic options to improve sectoral competitiveness, including a strategic framework and possible areas of intervention.

The methodology followed a multi-method approach, which involved analysing quantitative and qualitative data by applying the following tools:

- Desk review: At the outset, a desk review was conducted to gain an understanding of the current situation of the sector.
- Stakeholder workshop: During a first workshop, stakeholders from the food processing sector, including representatives of sector associations, Chief Executive Officers (CEOs) and business owners as well as relevant public institutions, gathered to identify and discuss the main drivers of sector growth and potential.
- Key informant interviews: During the field research, specialists were interviewed face-to-face using a semi-structured questionnaire. The research team consisted of one senior consultant assisted by a local professional in food processing. This activity resulted in a total of 35 visits to food processing companies. A full list of interviewees is provided in Annex 7.1.

The sub-sector information used in this study is the latest data available, obtained from the DoS, the Chambers of Industry (CoI) and the International Trade Centre (ITC). While working on the analysis of priority sub-sectors, whenever it was found relevant, comments on microenterprises and/or home-based businesses (HBBs) were indicated in a separate section, since the two types of businesses are different in their structure, objectives and resources. Based on the available data and stakeholders' assessment and in line with International Standard Industrial Classification (ISIC)[5], the following sub-sectors were identified:

- Processed and preserved meats
- Manufacture of vegetable oils and animal oils and fats
- Manufacture of bakery products
- Manufacture of other food products
- Processed and preserved fish, molluscs and crustaceans
- Manufacture of dairy products
- Manufacture of cocoa, chocolate and sugar confectionery
- Manufacture of prepared animal feeds
- Processed and preserved fruits and vegetables (F&V)
- Manufacture of grain mill products
- Manufacture of macaroni, couscous, noodles and similar products

The identified sub-sectors were prioritised based on the following weighting criteria:

- Potential for growth: market prospects, growth, export, competitiveness.
- Potential for employment.
- Potential to strengthen the role of women and/or gender equality.
- Potential for innovation and value addition.

Having applied the four above-mentioned criteria for assessing and selecting the most promising sub-sectors for MSME support and development, the following three were selected from the longlist to be considered as priority sub-sectors:

- Dairy products.
- Processed F&V.
- Arabic sweets (within the bakery products sub-sector).

5 ISIC revision 4 has recently been adopted by the DoS. However, statistical data used in this study is based on ISIC revision 3 provided by the Ministry of Industry, Trade, and Supply (MoITS) and the DoS.



The following challenges and limitations were identified during the analysis process:

- Some information gathered might be generic and subjective due to limited information being available at the sub-sector level, especially with regard to MSMEs.
- Quantitative figures were extracted from DoS import/export data, based on the Harmonised System (HS) codes, which are 4 and 6 digits long. Since one HS code may relate to more than one specific food item within a category, obtaining further information on a specific item, could be considered as indicative. For example, the HS code on Arabic sweets is covered within the category of sweetened bakery products.
- While this sector study uses the most recent data and information available from the DoS, the CoI and international sources, such as the World Bank, some available figures on food processing include agriculture and animal husbandry. Thus, specific details regarding the food processing sector and its prioritised sub-sectors (dairy, Arabic sweets and processed F&V) were not always available.
- During the field research, some interviewees were reluctant to provide the information requested, due to potential consequences. In other cases, in-depth information, for instance on cost structures, was either not readily available or based only on estimations due to a lack of advanced accounting systems and planning.

2 SECTOR PROFILE



2.1 BRIEF SECTOR DESCRIPTION

The processed food sector is among the most important economic sectors in Jordan, and has substantially contributed to Jordan's economic and social development. Food processing, ranging from the processing of dairy products (yoghurt, butter, jameed[6]) to the pressing of olives for olive oil, is a centuries-old cultural practice. Many MSMEs, especially in newly urbanised and rural areas, are based on traditional food processing capabilities. Since these traditional skills are handed down particularly by women, many national programmes tackling female empowerment and rural development have had a focus on food processing.

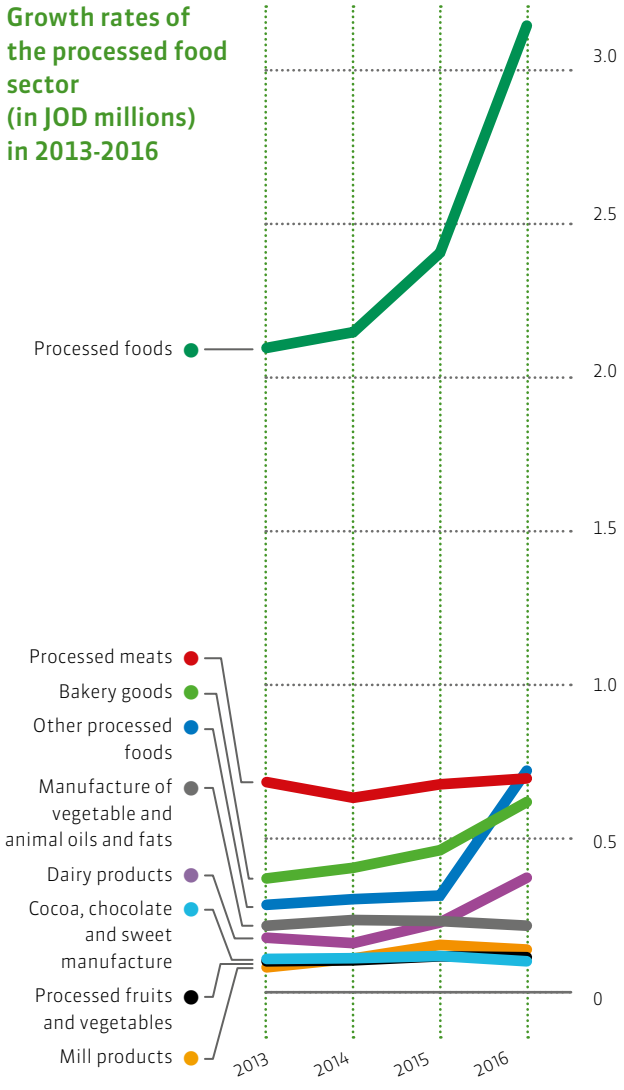
According to figures from 2017, the food processing, agriculture and animal husbandry sectors currently employ 49,935 employees[7]. With revenues (output) of Jordanian Dinars (JOD) 4.1 billion, these sectors represent 6.3% of GDP as per figures from 2015[8]. In 2016, the sector's exports were JOD 524.8 million[9], representing 10.2% of Jordan's total industrial exports[10].

Despite the growing importance of the food processing sector for Jordan's economy, there are no national strategies or policies apparent to promote the sector. The most recent initiative addressing the food processing sector is the Jordan Vision 2020 initiative, dating from 2006. The initiative is targeting the food processing sector among others and has generated a tentative action plan, supported by several private sector associations. Around 40% of the decisions taken have been implemented, contributing to the positive trend in the food processing sector. This shows that when the private and public sectors aim at implementing commonly agreed actions, positive results can be achieved.

Hence, joint and focused support for the food processing sector from the government and the chambers needs to be strengthened and based on a developed strategy, given that – unlike in other sectors – there is a large predominance of microenterprises that are not well represented within the chambers, for obvious reasons related to size and registered capital. Thus, the needs and possible aspirations of the individual sub-sectors could be unintentionally marginalised.

Figure 1 below indicates the growth rates of the food processing sector. It should be noted that the data provided by the MoITS considers 11 sub-sectors, but that provided by the DoS only covers 10 sub-sectors. The graph below reflects the data from the Economy Survey conducted by the DoS. The molluscs/fish and macaroni/pasta sub-sectors are mentioned by the MoITS, but not by the DoS, which instead mentions bakeries.

Figure 1:
Growth rates of the processed food sector (in JOD millions) in 2013-2016



Source: DoS, Economic Survey Results 2013, 2014, 2015 and 2016

6 Jameed is a desiccated form of milk that can be preserved in hot desert climates and later reconstituted with water. It is a traditional food processing method used by the Bedouin.

7 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

8 Ibid.

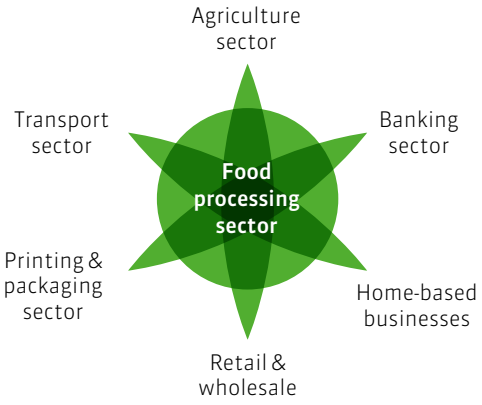
9 Ibid.

10 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018. Based on figures linked to certificate of origins.

The current importance of the food processing sector for Jordan is derived from its forward and backward linkages in the economy, its degree of integration and the added value generated as a result of these linkages. The food processing, agriculture and animal husbandry sectors represent 25% of Jordan's industrial output and 25.9% of the net added value within Jordan's industrial economy[11].

The following schematic describes the various backward and forward linkages of the food processing, agriculture and animal husbandry sectors with other relevant sectors.

Figure 2: **Backward and forward linkages of the food processing, agriculture and animal husbandry sectors**

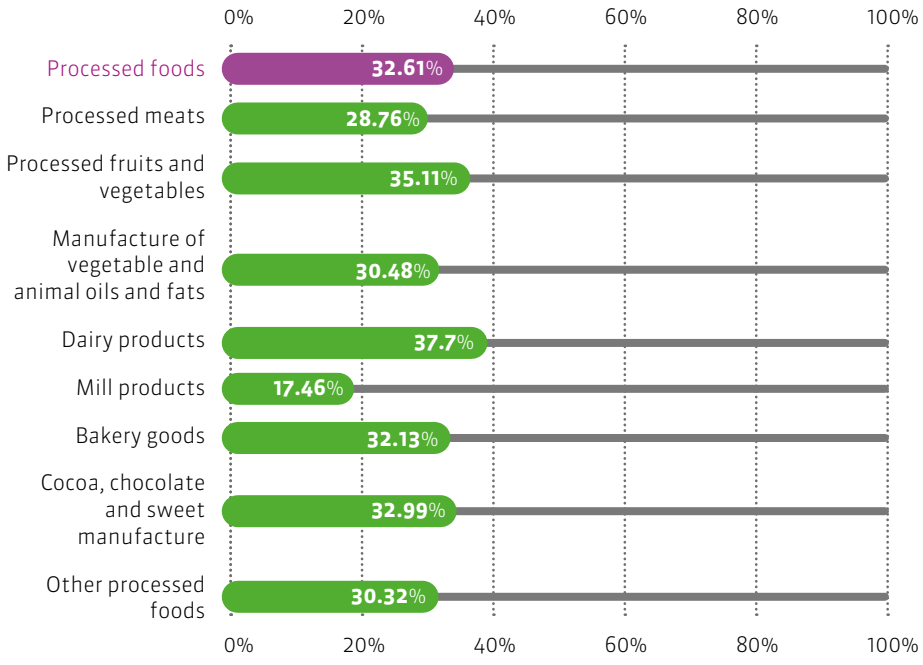


The food processing sector has relatively high levels of added value as well as many diverse sub-sectors. High added value means that the sector is relatively competitive and can compete in export markets. This is further validated by the fact that local production constitutes 47.2% of local consumption. The following graph (Figure 3) indicates the level of economic integration (intermediate consumption) with other sectors and the aggregated level of added value. Intermediate consumption refers to the amount of goods or services purchased from local enterprises to deliver their final product; this reflects the level of integration between local enterprises. The level of added value indicates the amount of value added to the product or service. It is equal to the difference between the cost of production and the amount received when the product or service is sold. Added value is an indication of the competitiveness of a product or service. However, it should be noted that there are no numbers linking increased employment to increased added value.

From the graph below, processed meats, processed F&V, dairy and bakery have the highest levels of added value within the processed foods sector. Although processed meats are one of the top-three sub-sectors with high added value, this was not considered as a priority sub-sector due to the import restrictions on most meat products.

Figure 3: **Level of added value of the food processing sector and sub-sectors in aggregate**

Percentage (%) added value compared to output



Meats

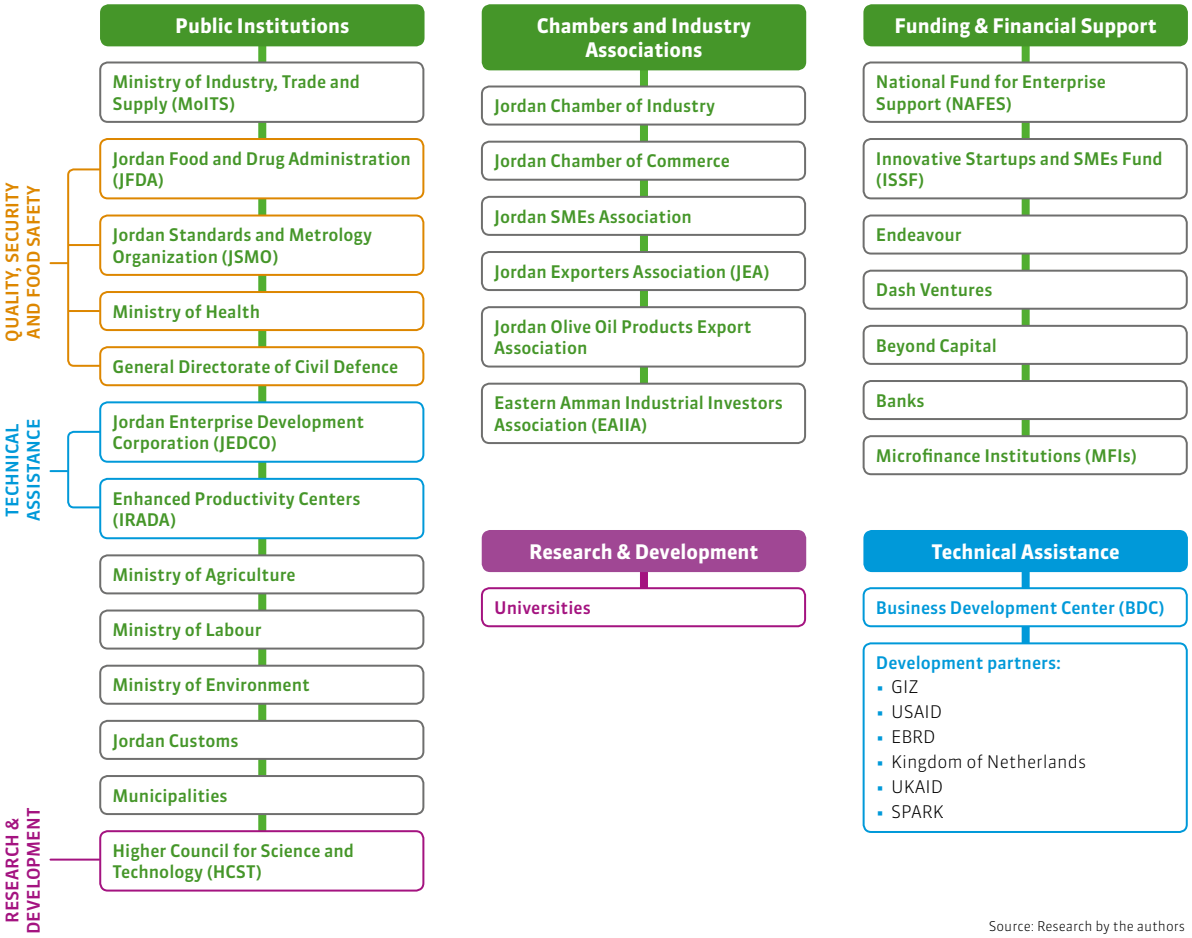
Meats will not be exportable to the US or the EU until Jordan is listed by them as approved for export of animal-based products. These restrictions do not hold for the other non-animal-based sub-sectors. More importantly, processed meats are highly capital-intensive, and are therefore not the domain of MSMEs. Costs of manufacturing processed meats in the GCC and regional markets are generally cheaper than Jordanian products. As such, export opportunities would be limited to these markets.

11 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

INSTITUTIONAL SET-UP

Jordan's institutional landscape consists of various institutions which directly or indirectly intervene in the food processing sector. Figure 4 below provides an overview of the institutional set-up and the main stakeholders.

Figure 4: **Institutional set-up of the food processing sector in Jordan**



Source: Research by the authors

The **Ministry of Industry, Trade and Supply (MoITS)** is the government entity responsible for regulating industries by type, classifying and registering companies according to internal regulation and preparing programmes, initiatives and studies aimed towards developing and improving an industry's competitiveness. The MoITS also regulates and monitors internal and external trade and prepares studies and agreements which protect the interests of the country and the citizen[12].

The **Jordan Enterprise Development Corporation (JEDCO)** is an arm of the MoITS which focuses on trade promotion, export development and enterprise development. JEDCO's goals are achieved through supporting entrepreneurship, MSME owners, start-ups and high-growth-potential and innovative SMEs, and assisting them in obtaining financing[13].

There are three **Chambers of Industry** in Jordan. These chambers are all part of the Jordan Chamber of Industry (JCI). They are based in the three most populous cities,

Objectives of the Jordan Chamber of Industry:

- Increase the competitiveness of Jordanian industry.
- Participate in the formulation of general industrial policy and establishing the strategy and plans to execute the policy.
- Facilitate growth and development of the industrial sector.
- Foster cooperation among the Jordanian chambers and between these chambers and foreign chambers and federations of industry.
- Support and foster the interests of industrial and microenterprises.

12 Ministry of Industry, Trade and Supply (MoITS), About the Ministry, https://www.mit.gov.jo/Pages/viewpage?pageID=181.

13 Jordan Enterprise Development Corporation, http://www.jedco.gov.jo.

respectively (Amman, Zarqa and Irbid). The JCI acts as the national entity, including under its umbrella all Jordanian chambers (Amman, Zarqa and Irbid).

The **municipalities**, such as the Greater Amman Municipality (GAM), are responsible for inspecting all registered companies to make sure that they fall within the urban planning scheme of GAM, as well as to ensure that all registered companies comply with the physical and functional requirements for facilities (space, parking, ceiling height, etc.). Municipalities are responsible for issuing vocational licences, which are required for companies to operate. Individual municipalities have independent processes, some of which mimic GAM processes. Nevertheless, municipalities abide by national health and safety certifications, provided by the ministries and independent bodies (JSMO, JFDA, General Directorate of Civil Defence, etc.) before providing municipal vocational licences.

QUALITY, SAFETY AND FOOD SECURITY

The national quality infrastructure in Jordan is overseen by the **Jordan Standards and Metrology Organization (JSMO)**. The JSMO operates in cooperation with other public and private organisations in the fields of standardisation, metrology (industrial and legal), accreditation and conformity assessment services (inspection, testing and product and system certification). These services are necessary to provide acceptable evidence that products and services meet defined requirements issued by regulatory authorities in Jordan (ministries and other government agencies). These requirements are classified as either technical regulations or sanitary and phytosanitary (SPS) measures and enforced by market surveillance authorities or requested by the market in terms of standards[14]. Market surveillance activities are performed by several government authorities, including ministries and government agencies. For instance, the **Jordan Food and Drug Administration (JFDA)** is an independent entity responsible for the inspection of food and pharmaceuticals as well as manufacturing facilities.

The **General Directorate of Civil Defence** is responsible for inspecting all commercial and industrial facilities, to make sure that they abide by national occupational safety regulations. Services provided include facilities design audit and validation against national standards (mechanical, civil, electrical), and facilities safety inspection (on-site inspection of safety features – exits, fire safety, storage, etc.), which all facilities are required to undergo to obtain a vocational/operational licence.

OTHER MINISTRIES

The **Ministry of Agriculture (MoA)** is responsible for the inspection of live animals and plants. The Ministry also issues licences for import and export of fruits, vegetables and live animals.

The **Ministry of Environment** performs environmental inspections of industrial facilities for licensing and carries out environmental impact assessments on proposed investments. The Ministry is also responsible for suggesting and/or approving waste management protocols for companies.

All Jordanian companies are also regulated by the **Ministry of Labor**. The Ministry of Labor requires that all enterprises have on file their specific internal by-laws and each employee must have read and signed them. All enterprises must pay social security tax. Both the Ministry of Labor and the Social Security Corporation are responsible for workplace safety and the reporting of work-related injuries.

DONOR AGENCIES

Jordan is also the beneficiary of several donor-funded local economic development programmes, which are described in section 2.5 (Figure 11).

PUBLIC–PRIVATE PARTNERSHIPS AND DIALOGUE (PPPS AND PPD)

The most active PPD is the **Jordanian Economic and Social Council (ECOSOC)** which includes members from the public sector, private sector, academia and labour. ECOSOC is supposed to be a sounding board for the government of Jordan (GoJ) when evaluating policy options. JEDCO is a PPP. The board of JEDCO is made up of private sector and public sector representatives. JEDCO focuses on general enterprise development and has no sector-specific focus. The National Innovation and Competitive Council is headed by the Prime Minister. The council has only met a few times since its establishment in 2012 and when it did meet, it focused on general economic challenges and not sector-specific needs. The **Higher Council for Science and Technology (HCST)** is also a PPP. The HCST board has members from the private and public sectors as well as academia. HCST has a modest Industrial Scientific Research

14 International Trade Centre (2015): Managing Quality in Jordan. A directory of services for SMEs. http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/30_jordan_National%20addendum%20to%20EQM%20Jordan-10%20Nov%202015_FINAL%20FOR%20WEB.pdf.

and Development Fund (ISRDF), which is tasked with funding applied research in Jordan to benefit industry. As such, two main PPPs (JEDCO and the HCST) have the mandate to be potentially effective, but need focus to do so.

FINANCIAL SUPPORT AND TECHNICAL ASSISTANCE

The following list outlines some of the entities providing support to MSMEs in accessing finance, in addition to the commercial banks:

- National Fund for Enterprise Support (NAFES)[15].
- Innovative Start-ups and SMEs Fund (ISSF)[16].
- Endeavor[17].
- Dash Ventures[18].
- Beyond Capital[19].
- Ahli Microfinance Company[20].
- Bank al Etihad[21].
- Microfund for Women (MFW)[22].
- Tamweelcom[23].

The following list outlines some of the entities providing technical assistance to MSMEs:

- Business Development Center (BDC)[24].
- IRADA[25].

These entities are described in full in Annex 7.2.

15 National Fund for Enterprise Support, http://www.hcst.gov.jo/en/node/155.

16 Innovative Startups and SMEs Fund, https://issfjo.com/home/.

17 Endeavor Jordan, http://www.endeavorjordan.org.

18 Dash Ventures, http://dashventures.com.

19 Beyond Capital, http://beyondcapital.vc/about.

20 Ahli Microfinance Company, http://www.amc.com.jo/en/products-services/financial-services.

21 Bank al Etihad, https://www.bankaletihad.com.

22 Microfund for Women, http://www.microfund.org.jo.

23 Tamweelcom, http://www.tamweelcom.org.

24 Business Development Center, http://www.bdc.org.jo/Impact.aspx.

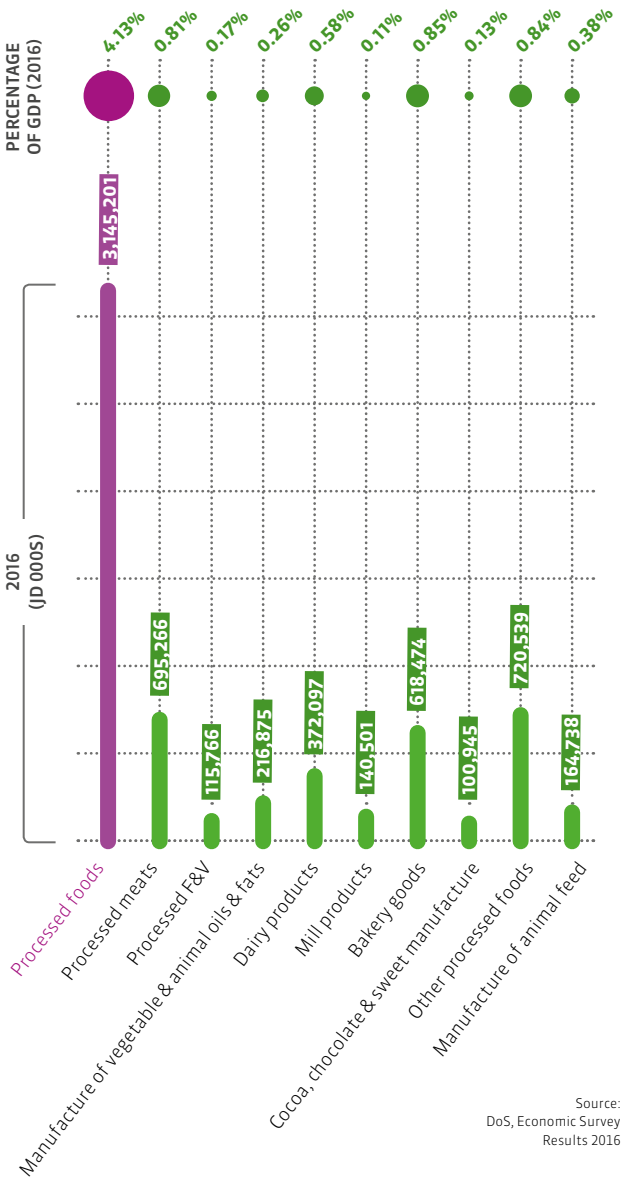
25 IRADA Program, https://jordan.gov.jo/wps/portal/Home/GovernmentEntities/Ministries/MinistryServiceDetails_en/ministry+of+planning+and+international+cooperation/services/irada+program?lang=en&content_id=com.ibm.workplace.wcm.api.WCM_Content/IRADA.

2.2 JORDAN'S FOOD PROCESSING PERFORMANCE: AN OVERVIEW

The food processing sector alone (excluding fresh produce and animal husbandry) represented approximately 4.13% of Jordan's GDP in 2016[26]. Based on the same data, the following table indicates the food processing sector and sub-sector contributions to GDP[27]:

Figure 5:

Processed food sub-sector production and contributions to Jordan's GDP



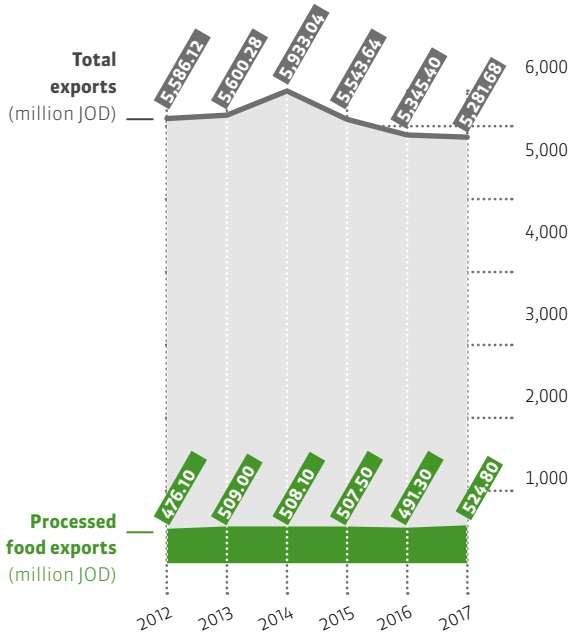
Source:
DoS, Economic Survey Results 2016

26 DoS Industry Survey 2016.

27 DoS Economic Survey 2016.

The Jordanian food processing, agriculture and animal husbandry industries are key contributors to the country's export economy. Figure 6 below shows the food processing export growth compared to total export between 2012 and 2017. The export markets for Jordanian processed foods show a slow but regular annual growth from 2012, although some sub-sectors did better than others.

Figure 6: **Contribution of the processed food sector to national food exports 2012–2017**



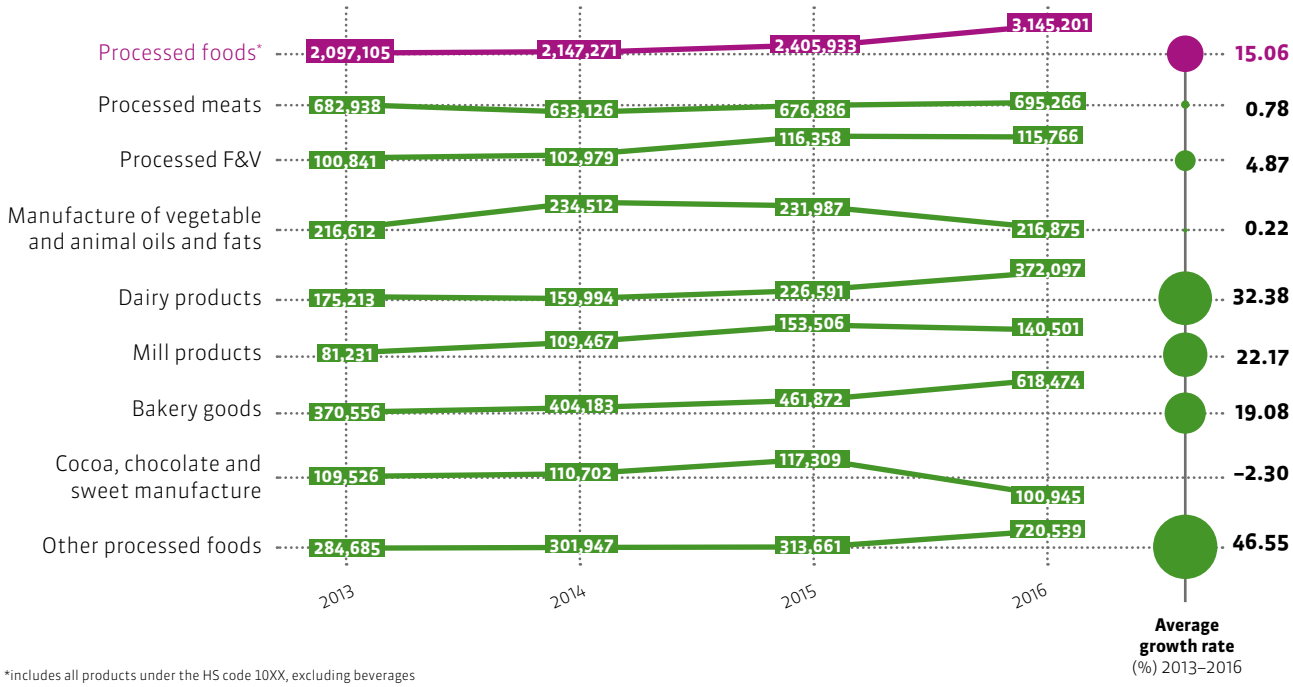
Source: Jordan Chamber of Industry (2018) and Statista

As presented in Figure 7 below, between 2013 and 2016, the various sub-sectors within the food processing industry show an increase in average annual growth. These growth rates indicate an increase in consumption and exports. An increase in consumption is more likely due to the increased refugee population, which not only consumes but may also produce at the micro level. One should note that higher-value items, such as processed meat, increased less than the more competitively priced categories of processed F&V, dairy products, bakery products and other food products. This is because economies of scale are not achieved in either the purchasing of imported raw meats for processing or the raising of live animals in Jordan. The increase in grain mill products makes sense as grain mills provide flour to bakeries.

The dairy and bakery sectors, for instance, show growth exceeding 32% and 20% respectively. The growth rate went down recently due to the border closure of certain regional traditional markets, in particular Iraq and Syria, due to political turmoil in those countries. The improvement reflects a certain increase in competitiveness and hence growth has remained positive. However, it still needs to be reinforced at both macro and micro level, as is recommended later in the report.

The growth rates of the various sub-sectors are calculated from the production data listed in the Figure 7 below, from 2013 up till 2016 (the most recent data available).

Figure 7: **Average growth rates of food processing sub-sectors in 2013–2016 (in percentage)**

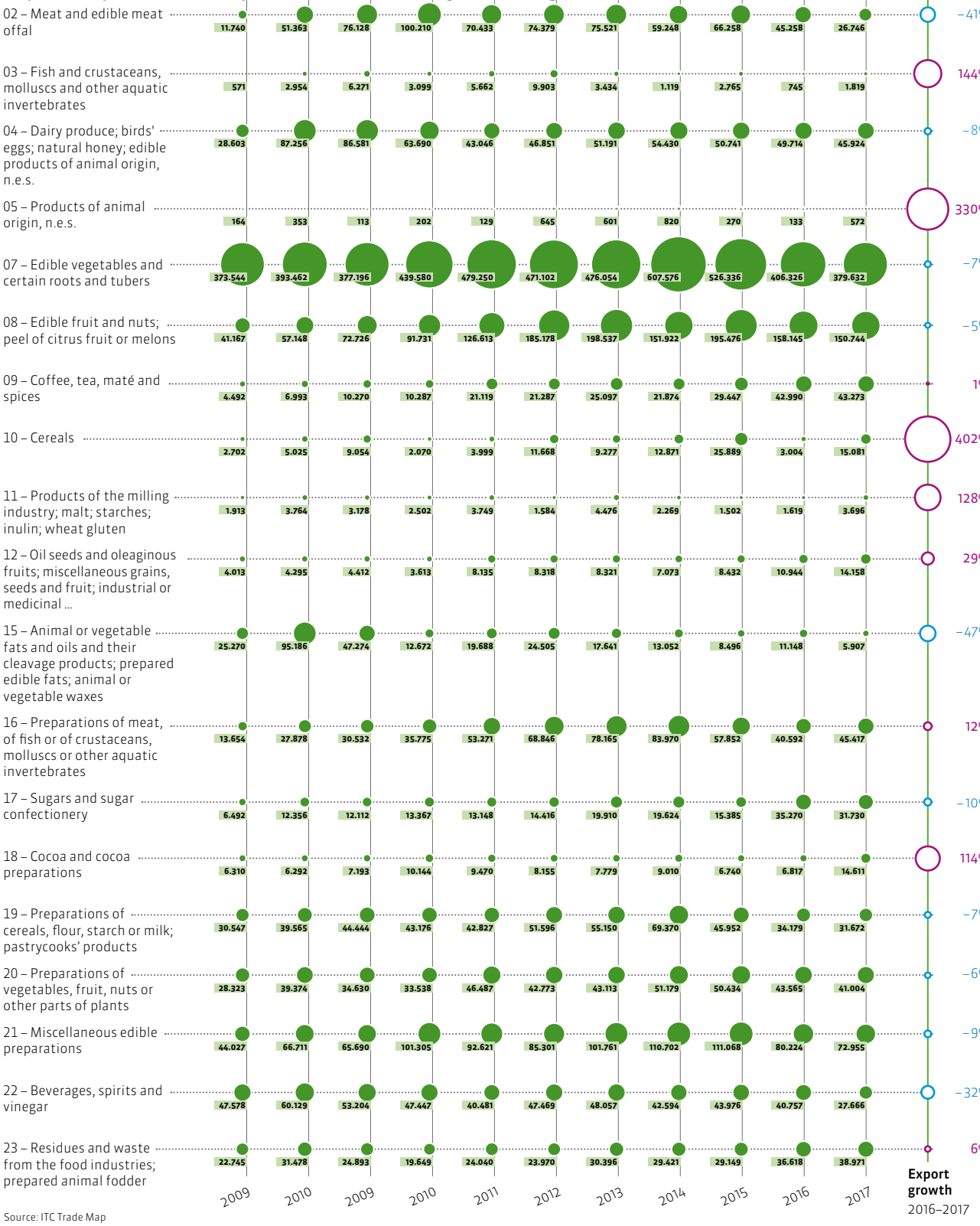


*includes all products under the HS code 10XX, excluding beverages

Source: DoS; Economic Survey Results 2013–2016

Figure 8:

Exports of processed food products from Jordan by HS two-digit codes in 2009–2017 (in USD thousands)



Source: ITC Trade Map

Considering the food processing sector's increase in added value of 3.8% from 2015 to 2016 as per the DoS figures, the MoA launched the second National Strategy for Agricultural Development 2016–2025 (NSAD) to align with the Jordan National Vision and Strategy 2025. It aims to support the agricultural sector through the development of the agro-food sector with the purpose of increasing GDP by 5% on a yearly basis.

The table above shows the exports of processed food products from Jordan between 2009 and 2017. However, it is not clear how much of the exports of the

various processed food products are generated by MSMEs. In 2017, the top-five exported processed food products were: 1) edible vegetables and certain roots and tubers (mainly tomatoes, fresh or chilled with a value of United States Dollar [USD] 222,969,000), 2) edible fruit and nuts; peel of citrus fruit or melons (apricots, cherries, peaches incl. nectarines, plums and sloes, fresh with a value of USD 96,749,000), 3) miscellaneous edible preparations (food preparations, not elsewhere specified [n.e.s.] with a value of USD 60,135,000), 4) dairy produce; birds' eggs; natural honey; edible products of animal origin, n.e.s. (cheese and curd with a value of USD 28,873,000), and 5) preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates (mainly prepared or preserved meat, offal or blood [excluding sausages and similar products, and meat extracts and juices with a value of USD 34,450,000]).

2.3 JORDAN'S FOOD PROCESSING COMPETITIVENESS AND BUSINESS ENABLING ENVIRONMENT

Based on figures from the 2018 JCI study, the three Jordanian Chambers of Industry had 2,645 registered enterprises operating in the food processing sector in 2017, out of which 2,093 (79.13%) were considered microenterprises. The remaining 552 enterprises (20.87%) were considered small, medium or large[28]. The food processing sector is thus composed of many micro and small enterprises, mainly family businesses which can survive on marginal profits. Formal enterprises within the food processing sector and its sub-sectors are members of the Jordanian Chambers of Industry either in Amman, Zarqa or Irbid. The food processing sector does not have a specialised business association which can assist in advocating with government and strategising with sector stakeholders. The food processing sector's needs are met within the Chambers of Industry, where they likely compete with other, more dominant sectors.

Board representation within the Chambers of Industry is by level of employment (number of employees). Thus, if the average enterprise in processed foods only has 19 employees, it is unlikely that the sector will be well represented at the board level. Additionally, because of the clear dominance of microenterprises (79.13%), the business owners themselves are generally not well versed in issues of policies, reforms or business environment. As such, reforms to enhance the opportunity and growth of the food processing sector are lacking.

As previously mentioned, the last strategy to have been introduced for the food processing industry was launched in 2006 as part of the Jordan Vision 2020 national strategy. There is a need for the food processing sector to envision its future and to identify a prioritised list of interventions required to make the business environment more competitive as well as to improve the performance of MSMEs.

Regarding the Jordanian business enabling environment, Jordan ranks above the regional average in the ease of doing business, according to the World Bank criteria. Jordan was ranked 10th in the region on the ease of doing business in the Doing Business Report 2018, published by the World Bank Group[29]. The encouraging regional rank, which increased by 2.38% compared to 2017, contrasted with Jordan's position internationally, which stood at 103rd out of 190 economies.

Despite these facts, the Doing Business Report 2018 looked at domestic SMEs to compare business regulation environments across economies and over time with the aim of encouraging economies to compete towards more efficient regulation. Its relevance to the Jordanian food processing sector might therefore be questioned, considering that it applies to the formal economy, while it is estimated that around 40–45% of businesses in Jordan (most of them microbusinesses) are informal and not benefiting from government services[30]. The reasons for people operating in the informal economy, either partially or completely, can be shown using cost-benefit analysis. A large number of international studies show that the increase in taxation and other social security contribution burdens has been the major contributing factor in the increase of informal economies[31].

While a 2013 United Nations Development Programme (UNDP) study pointed out that it takes less time and fewer human resources to start a business in Jordan

28 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

29 World Bank Group (2018): Doing Business 2018. Reforming to Create Jobs. http://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf.

30 Mercy Corps (2017): Market System Assessment for the Dairy Value Chain. Irbid & Mafraq Governorates, Jordan. https://data2.unhcr.org/en/documents/download/62006.

31 UNDP (2013): The Informal Sector in the Jordanian Economy. http://www.undp.org/content/dam/jordan/docs/Publications/Gov/The%20Informal%20Sector%20in%20the%20Jordanian%20Economy-jo.pdf.



than in the Middle East and North Africa (MENA) region, it also showed that the costs incurred in the process are above the regional average, with 24.2% of income per capita required compared with 18.8% regionally.

BUSINESS DEVELOPMENT SERVICES

Jordan has numerous BDS providers. Although over 1,000 companies have registered at the Controller Companies Department (CCD) at the MoITS since 1985, only about 20% provide BDS[32]. Such services include, among others, training, matchmaking, business plan and strategic plan development, marketing plan development, export development, HR consulting, and capital raising. The Institute of Management Consultants (IMC) in Jordan currently has a membership base of 146 consultants and trainers across multiple management disciplines. IMC members include professional individuals/freelancers as well as enterprises.

In addition to private sector players, Jordan has several national public sector and non-governmental service providers (as presented in section 2.2).

It should be noted that there is no general food processing association which advocates on behalf of the sector. The sector is generally represented through the Chambers of Industry and the SMEs Association. The Chamber of Commerce plays no role in the industry, except to facilitate imports of materials. Other associations, such as the Jordan Olive Oil Producers and Exporters Association (JOPEA), represent the respective manufacturers and advocate on their behalf.

FINANCIAL SERVICES

Access to finance is and continues to be a challenge in Jordan. The access to finance issue has remained a key impediment to development since at least 2005. For a list of entities supporting MSMEs with access to finance, please refer to section 2 and Annex 7.2.

The World Bank Group's Doing Business Indicator surveys have consistently identified access to finance as an impediment to economic development. This is further validated by the World Economic Forum's Global Competitiveness Report (2017–2018), which identifies access to finance as Jordan's second-most problematic developmental area[33]. The World Bank estimates that Jordanian MSMEs account for 95% of active businesses in Jordan, providing 70% of the private sector employment and generating around 40% of GDP. Yet, MSMEs receive only 13% of commercial loans[34].

Although there is an increasing number of financial institutions offering financial services, the consistently low ranking of the country in terms of access to finance indicates that other issues may be negatively impacting on the existing access to finance scheme.

32 CCD (2018): Companies registered with the objective of "consulting" in their corporate objectives.

33 World Economic Forum (2017): The Global Competitiveness Report 2017–2018. http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf.

34 Mercy Corps (2017): Market System Assessment for the Dairy Value Chain. Irbid & Mafraq Governorates, Jordan. https://data2.unhcr.org/en/documents/download/62006.

These issues may be related to the instability of legislation within the country, which might force banks to request draconian guarantees and collateral which MSMEs and entrepreneurs do not often have. Thus, financing may be available, but for a specific entrepreneur or company profile which rarely exists.

POSSIBLE MITIGATION MEASURES

The GoJ recognises the importance of MSME development. In fact, the government has been instrumental in the establishment of various venture capital funds, starting in 1988 with the establishment of the Jordan Technology Group (JTG), the Arab world's first venture capital company and business incubator. This has recently been followed by the establishment of the ISSF. Moreover, the Central Bank of Jordan (CBJ) has also been supportive of the establishment of micro-finance institutions (MFIs) as well as loan guarantee initiatives.

Regretfully, exploitation of these various tools is lower than expected. There is a general mismatch between how loans are provided and how Jordanian businesses operate. This may be due to the lack of business experience by credit officers in banks as well as an unstable legislative environment. Recent changes in the social security law and the proposed changes in the income tax law have made it increasingly difficult for businesses to plan. As such, their ability to pay off loans is often seriously affected as interest rates are likely to increase, because income tax on bank profits is likely to increase. The high tax burden, as indicated in the World Economic Forum's Global Competitiveness Index 2017–2018 and the associated penalties for late payment, has made businesses reluctant to make smooth and timely payments to their suppliers, preferring to hoard cash to make sure they can make the necessary payments to government. This of course slows down the velocity of money in the economy and hinders economic growth.



There is a mismatch between bank services and Jordanian companies. This is related to the types of companies which exist in Jordan (predominantly micro and small enterprises), as large commercial banks aim rather to serve medium to large companies. MFIs and their methods of dealing with businesses are closer to what the economy actually requires. Micro-finance lending therefore needs to be supported intensively to help facilitate the growth of the majority of Jordanian companies.

Risk of lending to MSMEs can be mitigated through the provision of loan guarantees and through increased training of credit officers on lending to this category of company, as well as on the impact of legislative changes to help them identify other potential mitigation actions. The government may consider providing loan guarantees against legislative changes as well.

RULES AND REGULATIONS

Various governmental institutions play an important role in the rules and regulations of new and existing businesses. A new business needs to acquire a series of licences and certificates from the MoITS, the chambers, the Ministry of Environment, GAM, the JFDA, and the General Directorate of Civil Defence before being able to start production and sell its products. The different steps that need to be followed in order to establish a new business in Jordan are presented in Annex 7.10. The major issues are the number of institutions involved in the process (mentioned earlier) as well as the time needed to finalise all formalities before being able to start production.

In terms of rules and regulations for MSMEs in the food processing sector, the Jordan National Vision and Strategy 2025, published by the Ministry of Planning and International Cooperation (MoPIC), is an important long-term strategy document. The initiative includes more than 400 policies or procedures that are intended to be implemented through a participatory approach between the government, business sector and civil society. The Jordanian Cabinet also approved The Industrial Policy Document for the period 2017–2021. This document aims to enhance the competitiveness of the industrial sector through enabling it to increase its exports to traditional and new markets, increase job opportunities for Jordanians and increase macro-investment through partnerships with the private sector[35].

As regards regulation at the global level, as a member of the WTO, Jordan has been working to harmonise its

35 The Jordan Times (2017): Cabinet approves Industrial Policy Document 2017–2021. 13 September. http://www.jordantimes.com/news/local/cabinet-approves-industrial-policy-document-2017-2021.

requirements according to global standards since it is obliged to comply with WTO provisions on tariffs and SPS requirements for food companies. Food safety is described in the Food Control Law No. 79 of 2001 and its amendments, which include instructions and regulations. Rules and technical regulations are shared among several institutions in Jordan, as described earlier and in section 2.2 (JSMO and JFDA). The quality infrastructure in Jordan is further detailed in chapter 3 of the study.

QUALITY INFRASTRUCTURE AND CERTIFICATIONS

FOOD SAFETY

As mentioned in section 2.1, the JFDA carries out all necessary actions on food safety, in terms of setting and implementing relevant legislation (instructions and technical regulations), performing monitoring and surveillance, and raising public awareness. For this purpose and as a regulatory body, the JFDA issues technical rules (instructions and technical regulations) relevant to food safety.

The JFDA is also a surveillance authority and guarantees that all food consignments whether imported or exported are accompanied by health certificates.

The JFDA's supervisory and inspection functions are, by virtue of the Food Control Law No. 79 of 2001, discharged in coordination with various official agencies. The JFDA performs food conformity evaluation procedures based on sanitary measures issued by the JSMO as technical regulations and standards to ensure food safety. Moreover, the JFDA inspects any establishment where workers handle food based on risk analysis, and controls goods manufacturing practices, hazards analysis and critical control points of food handling operations, according to the regulations in place.

In addition, the JFDA cooperates with public and private agencies, Jordanian scientific centres and universities and Arab regional and international organisations working in the fields of food, environment, diseases and technical and health regulations. Further, it provides advice on food safety issues to other government agencies involved in food control, as well as to the food industry and to consumers.

The JFDA applies a risk-based system for inspection of imported food consignments at border inspection posts (BIPs) where the procedures are computerised using the Automated System for Customs Data (ASYCUDA).

Moreover, the JFDA's surveillance mandate covers infant formula, special formula and complementary food for infants, food supplements, food packaging and contact materials, food additives, food for athletes and energy drinks.

The JFDA supports exports by granting health certificates for the purpose of exporting locally produced food according to the technical regulations and the applied health regulations upon the exporter's request, in a multitude of aspects.

LABORATORIES

There are over 19 government laboratories in Jordan. The list below presents the laboratories which are the most active and accredited by the United Kingdom Accreditation Service (UKAS) and the Accreditation Unit of the Jordanian Accreditation and Standardization System (JAS-AU):

- JFDA food laboratories located at Shafa Badran, as well as Irbid customs centre for chemical testing: physical testing of food including for heavy metals, additives and aflatoxins, other impurities and visible moulds; microbiological testing of food (e.g. Salmonella, Escherichia coli, Staphylococcus aureus, Bacillus cereus).
- Royal Scientific Society (RSS) laboratories.
- Food testing laboratory accredited for chemical testing of food.
- Private laboratories: Mohammad Abu-Elkhair and Partners Co. (Naratech Labs) accredited for microbiological testing of food and water.

Currently, there is no quality policy describing the roles and responsibilities of all organisations working in the field of quality infrastructure. However, the components of the national quality infrastructure in Jordan function by virtue of the Law on Standards and Metrology No. 22/2000 and its Amendment, which includes the responsibilities for standardisation, technical regulations, metrology, conformity assessment, market surveillance and accreditation. While the JSMO is the National Standardisation Body (NSB), any relevant government authority also has a mandate to issue technical regulations. Enforcement in the food and drug sectors is provided by the JFDA to ensure compliance with approved standards and technical regulations.

STANDARDISATION AND CONFORMITY ASSESSMENT

As noted, the JSMO is the NSB for the food processing sector and participates, together with other relevant

institutions, in the development of technical regulations. There are about 480 food standards in Jordan, excluding those related to packaging and transport. The Jordanian food standards are in line with the Codex Alimentarius standards since the JSMO is an active member of the Codex and the WTO, which also requires its members to base their sanitary or phytosanitary measures on international standards and guidelines. Accordingly, Jordanian food standards are either recognised internationally or at the regional level, depending on the type of food product.

The JSMO grants the Jordan Quality Mark (JQM), a voluntary conformity assessment mark, according to JQM Instructions 4/2007. The JQM is granted for food industries based on product compliance with technical specifications and system compliance with International Organization for Standardization (ISO) 9001:2000 and ISO 22000:2005. The JSMO also provides certification on global good agricultural practice (GAP) for agricultural entities.

There are also private sector certifying bodies, such as Lloyd's Register, SGS, TÜV-Greece, DNV and AQC Jordan, which provide certification in ISO 22000, ISO 9000, Occupational Health and Safety (OHAS), ISO 14000, Hazard Analysis of Critical Control Points (HACCP), British Retail Consortium Global Standard for Food Safety (BRCGS), Food Safety System Certification (FSSC) 22000, and several other certifications.

ACCREDITATION

The Accreditation Unit at the JSMO grants accreditation as an official recognition of the technical competence of conformity assessment bodies, testing and calibration laboratories, and certification bodies on national, regional and international levels through implementing international practices and signing multilateral recognition agreements.

SPS POLICY OR STRATEGY

Jordan's SPS measures follow WTO provisions under the Agreement on the Application of Sanitary and Phytosanitary Measures.

The MoA, together with other government authorities, namely the JSMO and the JFDA, is responsible for the SPS measures, including their issuance and approval as well as their enforcement and review, in order to protect human, animal and plant life and health against risks arising from additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuff, as well as plant- or animal-carried diseases and the spread of pests.

2.4 INTERNATIONAL, REGIONAL AND DOMESTIC MARKETS AND TRENDS

The **domestic market** should constitute the primary target for Jordanian food processing MSMEs, as the Jordanian population is growing at a fast pace and self-sufficiency of the country is low, except in certain sectors and sub-sectors, such as the dairy sub-sector. The fact that Jordan imports over 90%[36] of its food products supports this argument, although a big portion of the imports are basic commodities, such as sugar and wheat, where Jordan does not have a comparative advantage or does not produce. The percentage of processed products consumed on the local market is increasing. According to a recent study by the JCI, the food industry is supplying 47.2%[37] of the market needs. However, it is not clear if the study included raw materials and commodities as well.

Jordan has signed trade agreements with the European Union (EU), the Arab countries, the United States (US) and several other parties, which should facilitate trade and market penetration. In order to reap the benefits from these agreements, the competitiveness of Jordanian products requires improvement.

Jordan's traditional export markets have been in the **Arab world**. Exports to the Arab world in 2016 constituted 28.76%[38] of all Jordanian exports. The crises in Syria and Iraq decreased exports to these countries, as well as to other countries affected by the closing of borders with Syria and the lack of security inside Iraq, due to unsafe logistics. Despite the border closures, Arab markets still constitute around 75% of Jordan's processed food exports (see Figure 9 in the next page).

The main product categories exported to the Arab markets are: food products not specified elsewhere, such as ready-to-eat (RTE) preparations, sauces and similar items; dairy products, such as cheeses and labneh; processed F&V and vegetable preparations, such as tomato paste and canned food; cooked and canned meat preparations; sugar and sugar confectionery; cakes, biscuits and cookies.

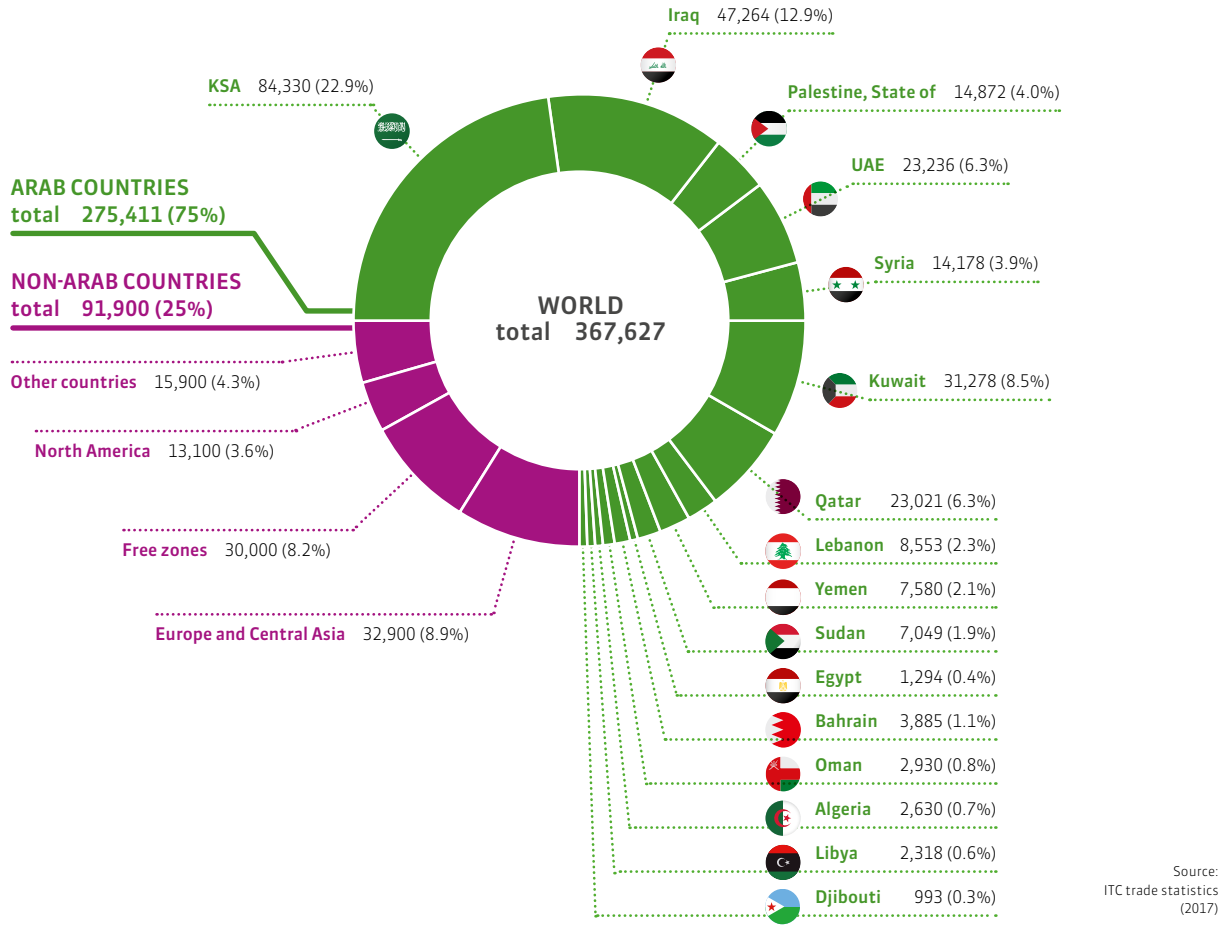
On the other hand, some **markets, such as the US and the EU**, have been facilitating market access for

36 Idris, I. (2016): Economic Situation in Jordan. K4D Helpdesk Report. https://assets.publishing.service.gov.uk/media/5b97f50ae5274a1391b13967/K4D_HDR_Economic_Situation_in_Jordan.pdf.

37 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

38 The Observatory of Economic Complexity (2016): Jordan. https://atlas.media.mit.edu/en/profile/country/jor/.

Figure 9: **Extracted data on processed food exports (in USD thousand and percentage of total exports)**



Source:
ITC trade statistics
(2017)

Jordanian products, mainly by relaxing rules of origin requirements[39]. This has had a positive but limited impact on Jordan's processed food exports, especially the export of dairy products to the US. An example is the export of jameed to the US, which positions the US as an important export destination for Jordanian dairy products after the Kingdom of Saudi Arabia (KSA). Nevertheless, results are still not significant when it comes to the EU countries as far as processed food products are concerned.

Figure 9 above provides accurate estimates of the Jordanian processed food exports by country and region, including all the above categories.

The market trends for the food processing sector show increasing exports through improved competitiveness, the development of products with more added value such as prepared or ready-to-eat food products, and continued reliance on locally produced raw materials and innovation in packaging design. Some examples are given in sub-section 3.1.5 and in the analysis of the priority sub-sectors.

Up to now, Jordan has been diversifying its exports principally by targeting the entrance of traditional products into new markets, but has failed to introduce innovative products within its product range. Underlying factors may include a limited degree of innovation or support for new export products (such as branding and marketing)[40].

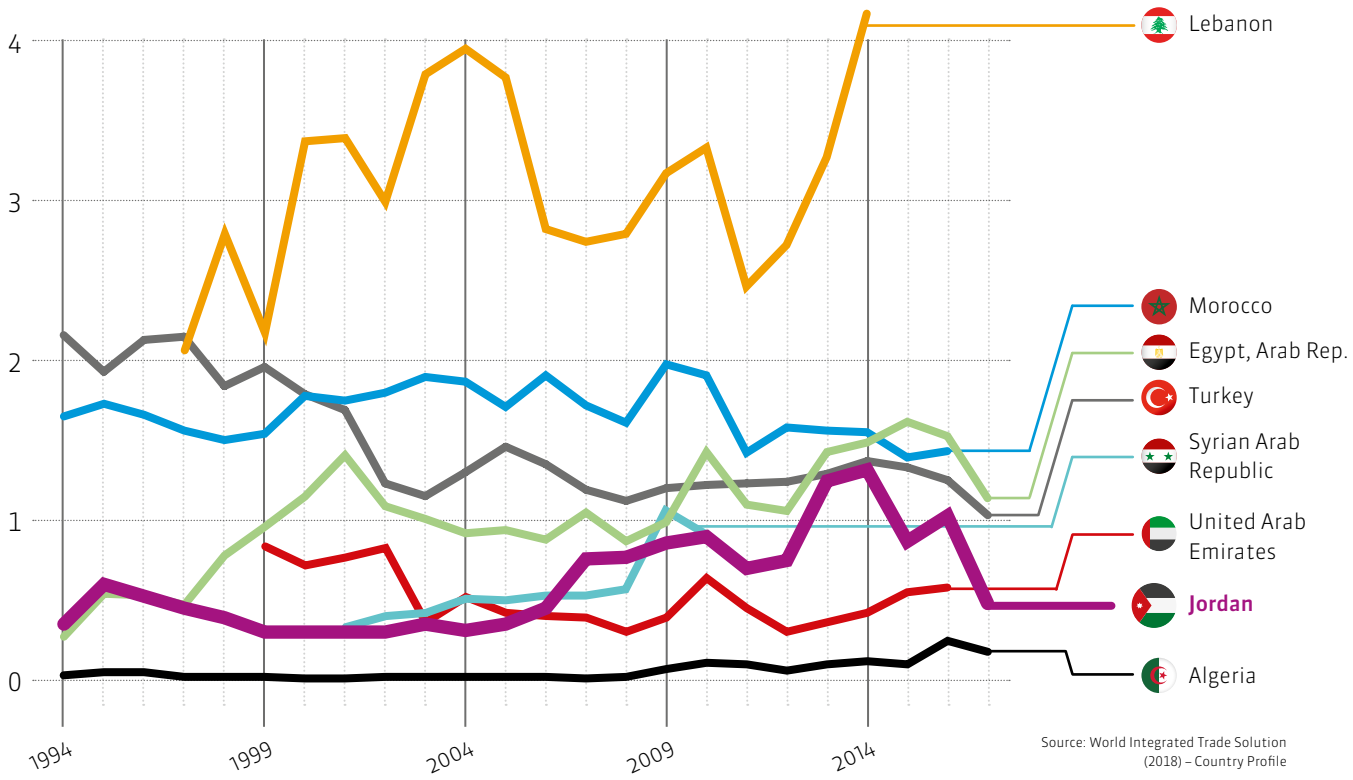
The general assessment also applies to the sub-sectors examined, since only a few start-up companies are trying to gain ground in international markets with innovative products and marketing ideas in the food processing sector.

Referring to the World Bank indicators, food products in Jordan are not considered to have a high reachable comparative advantage (RCA). Only in 2012–2013 did Jordan start to have an RCA greater than 1. The RCA is an indicator used to evaluate the export potential of countries compared to other countries and the world. Under normal trade conditions, an RCA less than 1

39 See Annex 7.3 on trade policies relating to Jordan.

40 Ministry of Industry, Trade, and Supply (MoITS) (n.d.): National Export Strategy 2014–2019. http://inform.gov.jo/Portals/0/Report%20PDFs/4.%20Enabling%20Environment/iii.%20Exports%20&%20Trade%20Policy/2014-2019%20National%20Export%20Strategy.pdf.

Figure 10: **Jordan's food products revealed comparative advantage (RCA)[41] compared with multiple countries**



Source: World Integrated Trade Solution (2018) – Country Profile

indicates that a country does not have a comparative advantage for exporting a product compared to the world exports. The figure above shows, for example, that Lebanon has been exceeding four to five times its estimated share of exports in food products, while Syria lost its comparative advantage after the war, and so on.

As per Figure 10, Jordanian (yellow line) food products show a low RCA compared to countries such as Lebanon, Turkey, United Arab Emirates (UAE), Syria, Egypt and Iraq.

The indicator shows that the progress made by the food processing sector in Jordan over the past 10 years has slightly improved the sector's export potential compared to several regional countries, but it still has to gain share in world exports to catch up.

INTERNATIONAL PRODUCT TRENDS

A survey report produced by Deloitte on its customers in 2017 showed that consumer preferences are shifting from the traditional price, taste and convenience to health and wellness, transparency, safety, social impact and experience; 88% of Deloitte's clients were already reformulating products[42]. These evolving preferences are influencing food markets and are becoming increasingly influential at a fast pace in certain developed markets. This could inspire Jordanian food processors at all levels.

HEALTHY NUTRITION

So-called "superfoods" are becoming more and more popular due to their specific characteristics. It should be noted, however, that despite these trends, it is very difficult to get superfoods approved in the EU, the US and several Gulf markets, as long as claims regarding their positive impact on health are not proven.

FOOD SAFETY

Food safety remains one of most important issues in food production (maximum residue levels (MRLs),

41 The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products that can be competitively exported is static. It helps to assess a country's export potential and can also provide useful information about potential trade prospects with new partners. A comparative advantage is "revealed" if the value is greater than one. A country with an RCA value below one is considered to have no export comparative advantage in the product.

42 Deloitte (2018): Health & Wellness Progress Report. Based on 2017 survey findings. https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Consumer-Business/cb-2018-health-wellness-report.pdf.

microbial contamination, traceability, certifications like GLOBALG.A.P. or BRCGS).

CORPORATE SOCIAL RESPONSIBILITY (CSR)

Consumers in EU and US markets are more concerned about where products come from and how they are produced. Demand for products following Business Social Compliance Initiative (BSCI) or Global Social Compliance Programme (GSCP) production principles is increasing.

ORGANIC PRODUCTS

Growth in products containing organically grown raw materials has been a mega trend for many years in the EU and US, though market share is limited to around 5% of total sales.

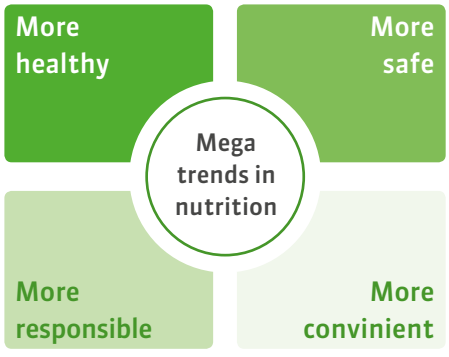
CONVENIENCE

Convenience, smaller-portion packs and e-commerce are becoming more popular. Leaders in north-west Europe are the United Kingdom (UK), Germany and the Netherlands.

NICHE MARKETS FOR EXOTIC PRODUCTS

Exotic products from remote countries, for instance, from tourist destinations, remain an increasing niche market. Given certain characteristics, such as branding and storytelling, consumers are willing to pay premium prices for products of good taste and with the "certain something".

Figure 11: **International mega trends in nutrition**



2.5 CONDITIONS AND IMPLICATIONS FOR JORDAN'S FOOD PROCESSING SECTOR

POLICY AND INSTITUTIONAL BOTTLENECKS

The procedures to register and license a business (see Annex 7.10) reveal the difficulty MSMEs may face in the initial phases of establishing their business. The variety of different certifications needed and the number of institutions involved alone translate into a bottleneck.

Nonetheless, since 2009, industrial policies in Jordan have been focusing on expanding the local production base by:

- Increasing and diversifying production.
- Developing the quality of national products.
- Increasing products' ability to penetrate traditional and non-traditional markets.
- Developing the partnership between the public and private sectors.
- Offering horizontal indirect financial and technical support.
- Determining priorities, such as energy saving and using lower-cost alternatives, and support areas, which include export industries, high-added-value industries and labour-intensive food industries.

It is difficult to assess the extent to which these policies have been implemented, but based on discussions with stakeholders, the food processing sector does not seem to have greatly benefited from the budgets allocated to such policies.

Although policy reforms are needed in order to support the food sector, the main bottlenecks for the sector are not institutional. At the national level, there is an absence of a clear strategy for the marketing of processed foods. The processed foods sector does not have a specific association. Instead, the needs of the sector are generally addressed through the Chambers of Industry and the SMEs Association. Micro and small food processing enterprises are underrepresented in the Chambers of Industry because of the dominance of medium and large enterprises within the sector.



Board representation within the chambers has traditionally been based on enterprise size (employment) and registered capital. Thus, the sector has had difficulty in organising itself with proper representation of MSMEs and in identifying the objectives and priorities to be addressed. This difficulty is further explained by the structure of Jordan's economy in terms of its large informal sector, especially in agriculture and the food processing sub-sectors, as well as the particular challenges in the region. As a result, elaborating a marketing strategy for the food processing sector based on formal businesses alone may not benefit the sector as a whole. Linkages between formal and informal businesses would contribute positively to the growth of the sector.

One way to tackle the bottlenecks is through the National Export Strategy 2014–2019, published in 2014 by the MoITS. The priority sectors selected by the Strategy include: fresh F&V, paints, management consulting services, prepared and preserved meat, electrical wires and cables, and architecture and engineering. Cross-cutting strategies were selected to strengthen the business environment, including trade facilitation and logistics, quality management, employment, technical and vocational education and training (TVET), trade information and promotion; addressing some of the concerns of women in businesses and the fate of small family businesses could also be useful. The rule on the protection of origin could be of help to the sector and improving market intelligence can provide leverage to producers in accessing external markets or in identifying opportunities.

In terms of the political environment, the ongoing war in Syria is cited as a major obstacle to the recovery of the traditional food market. In connection with Iraq, the non-tariff trade barriers, as well as the industrial policy of neighbouring countries which establish such barriers, are also considered a hindrance.

SOCIAL AND ENVIRONMENTAL ISSUES

The food processing sector is very diversified. It includes all sizes of industrial MSMEs and is closely linked to agricultural raw materials, whether locally grown or imported. Looking at the added-value sectors, such as the priority sub-sectors described in the following section, it is easy to see the importance of the role of skilled labour in the efficiency and quality of the output. This is related to social aspects in more than one dimension. One example is the MSME employment of women, who may have a particular familiarity with certain traditional food processing methods, particularly in microbusinesses.

According to the International Labour Organization's (ILO) definition, the informal economy is "broadly characterised as consisting of units engaged in the production of goods and services with the primary objective of generating employment and income to the persons concerned"[43]. Households with market production are:

- Informal own-account enterprises – which may comprise either all own-account enterprises or include only those which are not registered under specific forms of national legislation.
- Enterprises of informal employers, which may be defined in terms of either the size of the unit below a specified level of employment, or the non-registration of the enterprise or its employees.

In some cases, the food sector is influenced positively by such businesses if the situation allows them to operate without sanctions and to survive against much more powerful entities (e.g. in the dairy sub-sector); but the influence can also be negative if food items proliferate that could be hazardous to human health due to lack of hygiene standards in production – this could also damage the reputation of the food sector as a whole. A balance could be achieved through linkages between market-oriented large companies and product-/income-oriented microentities. Although most of the sector is dominated by micro and small businesses in terms of numbers, collectively, these businesses do not contribute as much as the larger companies in terms of revenues or exports. Thus, the sector is dominated by medium to large companies financially and in terms of exports.

Being a sector that affects human health directly, whether in the form of nutrition or in the form of

43 International Labor Organization (ILO): Resolutions Concerning Statistics of Employment in the Informal Sector Adopted by the 15th International Conference of Labour Statisticians, January 1993, para. 5.

food hazards, food processing can only grow and be sustainable if the human resources are well trained and educated on food safety measures and laboratory testing. The case of the food processing sector, whether formal or informal, has highlighted the importance of involving women in certain activities that require patience and hygiene, and in quality control activities; (at least during morning shifts because, culturally, it is unacceptable for women to work night shifts). In certain industries, women now constitute most of the labour force. This will soon modify the prevailing 20% women and 80% men ratio.

The training of women on food safety and quality control will not only increase their opportunities, but also promote local growth and potential exportability.

As regards the environment, food processing entities and, behind them, the agricultural sector, have practically monopolised clean water usage in Jordan, without providing solutions to the quality and quantity of waste water they produce. Without a plan to recycle the water utilised, the Jordan food industry might soon be facing a serious issue regarding its ability to access abundant clean water to allow it to maintain quality and hygiene. At the level of large companies, which can invest in expensive waste water treatment systems, a solution could be feasible – but not at the level of MSMEs. A solution should be found within the development of the country's infrastructure[44].

CURRENT SUPPORT BY INTERNATIONAL DEVELOPMENT PARTNERS

Jordan is the beneficiary of numerous international donor programmes. The table below briefly describes them.

Figure 12: **List of institutions and programmes in Jordan relevant to food processing**

DONOR PROGRAMMES AND PROJECTS

USAID Jordan Local Enterprise Support Project (LENS)

A USD 50 million project that focuses on support for small HBBs. The project supports women from remote regions and villages in establishing their own HBB. Support is provided in product development, market linkages (mainly with restaurants), marketing, consultancy on policy and legal requirements and transport being one of the main bottlenecks for the development of the sector. The project is nationwide and based on the value chain approach. It has developed a toolkit and a start-up guide.

USAID Jordan Competitiveness Programme (JCP)

The focus of JCP is on investment and export development, seeking to identify high-export-potential sectors and enhance Jordanian exports to Africa. It works with the private sector, business associations and the GoJ to propose and advocate for enabling legislation and regulation; leverage the suggested policy interventions to increase exports and attract foreign direct investment; and ensure that investments result in employment opportunities for Jordanians and, where appropriate, other residents of the Kingdom.

EU Jordanian Action for the Development of Enterprises (JADE) Project

JADE is an EU-funded project that was launched in October 2016 and should run until February 2020. The overall budget is EUR 40 million with the objective to promote and support market access to the EU. The project is an EU partnership with different partners in the EU including the Belgian and Italian Chambers of Commerce. The project has assessed 70 and selected 25 business support organisations in Jordan to work with SMEs directly. Up to now the project has received 57 applications from SMEs. Twenty companies are starting the pilot phase. They will receive an initial diagnostic and up to USD 25,000 of cost-shared technical assistance.

Food and Agriculture Organization of the United Nations (FAO) Country Programming Framework (CPF)

The CPF facilitates multilateral cooperation, supports GoJ programmes and pilots innovative approaches.

GIZ / Employment-oriented MSME Promotion Project (GIZ-MSME)

The objective of the GIZ-MSME Project is to boost economic and social prospects for people in the MENA region. It seeks to improve enterprise competitiveness in selected sectors, enhance MSME competencies, and improve the business and investment climate. The project will support the implementation of sectoral and market strategies in Jordan.

GIZ / Trade for Employment Project (GIZ-T4E)

The GIZ-T4E Project focuses on building capacities and strengthening structures in a sustainable manner to enhance the conditions of Jordanian companies to increase their trade performance for employment.

NON-GOVERNMENTAL ORGANISATIONS (NGOS)

SPARK

SPARK is a Dutch NGO focusing mainly on education and training, but also on food processing. SPARK cooperates with universities and provides scholarships and training for start-ups and MSMEs of below 50 employees. Export promotion is not within its remit. The approach is to directly support SMEs and to support refugees in integrating into the working environment.

NON-GOVERNMENTAL ORGANISATIONS (NGOS)

European Bank for Reconstruction and Development (EBRD)

The EBRD helps small and medium-sized businesses grow and succeed to become genuine catalysts for their economies. It helps to transform small and medium-sized businesses by assisting them to connect clients with local consultants and international advisors. The EBRD provides MSMEs with support throughout the process, using its experience to ensure optimum results.

United Nations Industrial Development Organization (UNIDO)

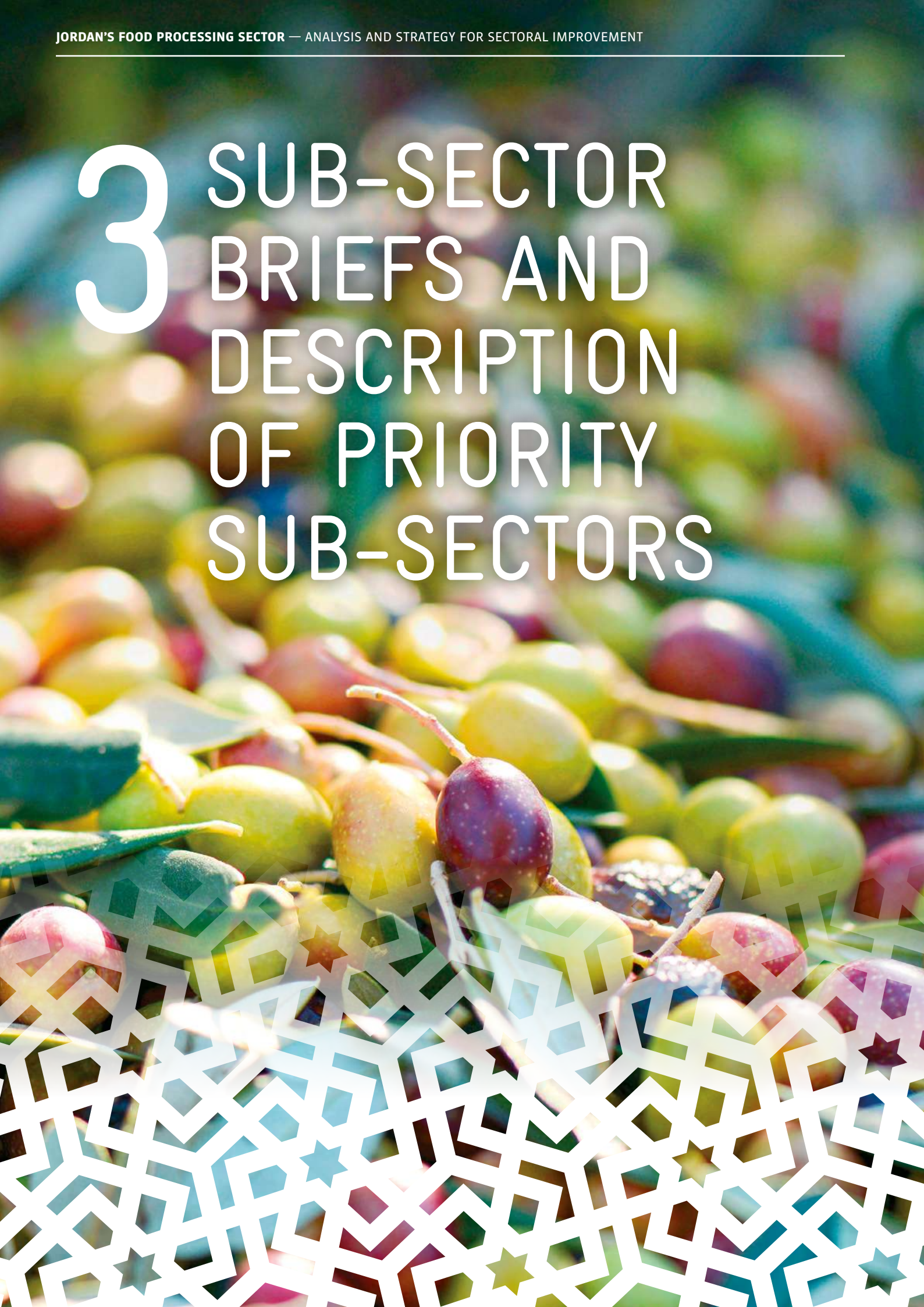
UNIDO is a specialised agency of the United Nations that promotes industrial development to reduce poverty, integrated globalisation and environmental sustainability. Many UNIDO interventions focus on capacity building in production, trade and energy and environment.

ILO

Established in 1919, the ILO is the only tripartite United Nations agency. The ILO brings together governments, employers and workers of its 187 member states to establish labour policies and standards and devise programmes which promote decent work for women and men.



44 Hadadin, Nidal, A., and Tarawneh, Zeyad, S. (2007): Environmental Issues in Jordan, Solutions and Recommendations. American Journal of Environmental Sciences 3 (1): pp. 30–36.



3 SUB-SECTOR BRIEFS AND DESCRIPTION OF PRIORITY SUB-SECTORS

3.1 PROFILING OF MSMEs WITHIN THE FOOD PROCESSING SUB-SECTORS

This section presents the characteristics of MSMEs within the following food processing sub-sectors:

- Processed and preserved meats.
- Processed and preserved fish, molluscs and crustaceans.
- Processed and preserved F&V.
- Manufacture of vegetable oils and animal oils and fats.
- Manufacture of dairy products.
- Manufacture of grain mill products.
- Manufacture of bakery products (including Arabic sweets).
- Manufacture of cocoa, chocolate and sugar confectionery.
- Manufacture of macaroni, couscous, noodles and similar products.
- Manufacture of other food products.
- Manufacture of prepared animal feeds.

The following characteristics are highlighted whenever possible:

- Number of firms.
- Products.
- Employment.
- MSMEs' role, challenges and opportunities.
- Market channels.
- Gross margins.
- Quality.
- Competitive performance.

As previously mentioned, MSMEs constitute the largest portion of the business enterprises within the sector, with more than 80% being small or micro. There are a significant number of informal businesses, which tends to perturb the market since these informal companies do not follow the same rules. This of course creates constraints on the stability of the sector and renders the development of a national marketing strategy very challenging. Jordanian MSMEs could make use of the opportunities ahead which have been detailed in chapters 4 and 5.



3.1.1 FOOD PROCESSING MSMEs: ESTABLISHMENTS AND EMPLOYMENT

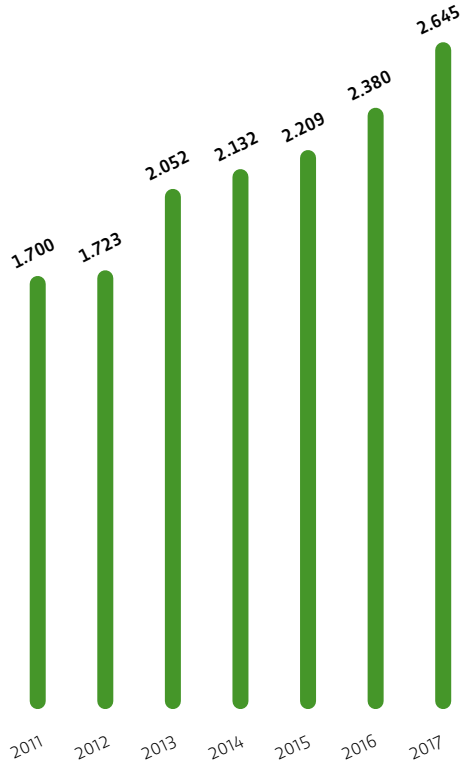
The table below presents the data on the number of establishments, number of employees and registered capital per sub-sector, covering the chambers of Amman, Irbid and Zarqa. The figures are based on recently collected data from the Amman Chamber of Industry as of August 2018.

Figure 13: **Number of establishments, employees and registered capital (in JOD) per sub-sector**

FOOD PROCESSING SUB-SECTOR	ISIC CODE	NO. OF ESTABLISHMENTS	NO. OF EMPLOYEES	REGISTERED CAPITAL (JOD)
Processing and preserving of meat Fresh, chilled, frozen beef, lamb and chicken, canned meats, mortadella, beef patties, sausage, smoked meats, and Armenian sausages. Does not include data from the CoI.	1010	105	22,537	468,007,352
Processing and preserving of fish, crustaceans and molluscs Canned fish.	N/A	4	776	54,600,000
Processing and preserving of F&V Rice, frozen vegetables, canned vegetables, pickled vegetables, frozen fruits, canned fruits, dried fruits, jams, molasses, dates, dried apricot rolls, peeled tomatoes, dried vegetables, potato chips, tomato paste.	1030	182	8,000	62,854,188
Manufacture of vegetable and animal oils and fats Animal fat and oil, soya oil, olive oil, sesame oil, tahini paste, black seed paste, corn oil, palm oil, sunflower oil, coconut oil, vegetable oil, margarine.	1040	117	7,936	370,697,760
Manufacture of dairy products Pasteurised milk, powdered milk, drinking yoghurt, eating yoghurt, butter, cheese, ice cream.	1050	192	17,838	256,721,603
Manufacture of grain mill products Wheat flour, cornflour, bran, ground lentils, semolina.	1061	17	1,537	90,970,000
Manufacture of bakery products Bread (bakery), cakes, biscuits, pies, pastries, gateaux, Arabic sweets, chilled pie dough, dough mixes.	1071	489	11,150	63,584,803
Manufacture of cocoa, chocolate and sugar confectionery Cocoa extract, chocolates, sugar candies, chewing gum.	1073	225	7,219	32,766,924
Manufacture of macaroni, noodles, couscous and similar farinaceous products Macaroni, couscous, fine pasta.	N/A	12	1,199	5,405,000
Manufacture of other food products (n.e.c.) Roasted and ground coffee, ground herbs and spices, ground oregano, table salt, tea and tea herbs, children's food, soups, soya and milk juices, vinegar, condiments, sesame, yeast, baking powder, vanilla powder, fruit juice, powdered drinks, flavours, sesame husks, fruit concentrate, citrus fruit concentrate, bread additives, corn flakes, canned grains/cereals, starch, sesame paste (halawa), custard, sugar.	1079	467	24,414	267,407,696
Manufacture of prepared animal feeds Ground barley, animal feed, chicken feed, mixed feed, animal feed concentrates, salt licks, fish feed, dog/cat food, premix – animal feed additives.	1080	76	5,235	124,096,866

Source: Amman Chamber of Industry (2018)

Figure 14: **Growth in the number of establishments in the food processing sector between 2011 and 2017**



Source: DoS, Economic Survey Results (2011 to 2017)

The case study to the right presents an example of a company facing employment turnover in a rural area, but which is managing through an innovative approach.

Establishments registered with the Chambers of Industry in Amman, Zarqa and Irbid numbered 2,645 in 2017[45]. This represented a growth of 11.5% from 2016, when there were 2,380 registered establishments. This growth indicates the resilience and competitiveness of companies, which has enabled them to weather the regional instability since 2011 (the start of the war in Syria). This is further validated by the fact that 47% of local consumption is covered by food processing and related sectors[46]. The graph (Figure 14) describes the growth in the number of establishments in the food processing sector between 2011 and 2017.



Case study – F&V processing in remote areas

The company BASITA is a small-scale F&V processing enterprise in the Jerash region, north of Amman, above of one of the feeders of the River Jordan. The company generates a yearly turnover of USD 1 million from vegetable conserves in glass jars and bulks, e.g. dried tomatoes, capers, olives, various dips, pastes, etc. The turnover growth rate over the last few years has always been around 50 to 60%.

Some 70% of raw material is sourced from the company's own farms, which are already organic-certified. The ISO 22000 certification process is under way. Retail products are marketed under the brand name Tuneib and labelled as Premium Quality 100% Natural.

Some 60% of all production is exported to neighbouring countries as well as to Europe and the US. All distribution goes through one wholesaler. The company holds 80% of the domestic market for sun-dried tomatoes.

The company employs 11 permanent staff (incl. managers) on its small-scale production premises and is about to move to more modern facilities due to increased production volume. The manager complained about a lack of loyalty to the company among unskilled workers, which leads to a high turnover of workforce.

During harvest season the company hires a number of women from neighbouring villages on a performance-related payment system. The wages the women can achieve are relatively high, around 50 JOD/day, but a) harvest season only lasts a few weeks, and b) women in the region otherwise have few opportunities to work .

Since its olive groves and tomato plantations are located approx. 400 m above the River Jordan and its feeder, the company has to pump water upwards, which results in a very high electricity bill. This is the main reason for its lack of competitiveness in markets abroad, and makes the company's products 100% more expensive than competing products from, e.g. Italy. In the case of olive oil the ratio is even higher.

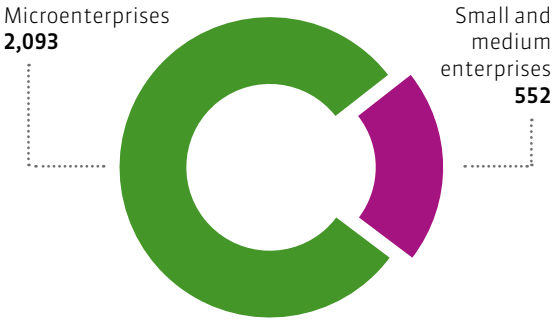
In order to find new markets and distribution channels the company does its own market research (consumer market surveys) and supplies a big processed food producer in Amman (KASIR) with spices as topping for hummus products.

The manager sees attendance at food fairs and exhibitions as the most effective way to promote his products.

45 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

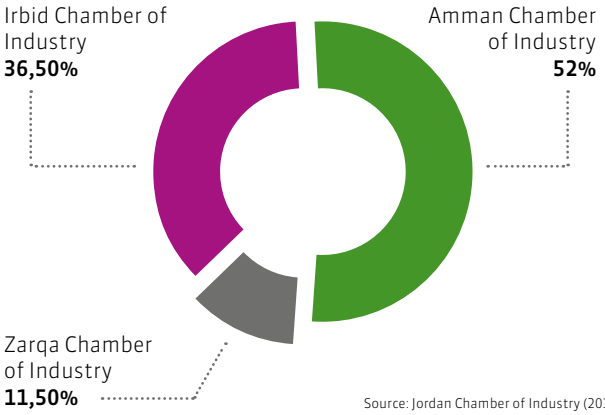
46 Ibid.

Figure 15:
Percentage of MSMEs in processed food, agriculture and animal husbandry sector in Jordan



Source: Jordan Chamber of Industry (2017)

Figure 16:
Proportion of MSMEs in Amman, Irbid and Zarqa



Source: Jordan Chamber of Industry (2018)

Based on figures from the JCI, the three Jordanian Chambers of Industry had a total 2,645 registered enterprises in 2017, out of which 2,093 (79.13%) were considered microenterprises (Figure 14)[47]. The remaining 552 enterprises (20.87%) are considered small, medium or large. It should be noted that the data from the Jordan Chamber of Industry does not differentiate between processed food, agriculture and animal husbandry. Since the data is presented as a whole, the number or percentage of MSMEs in the food processing sector cannot be depicted alone.

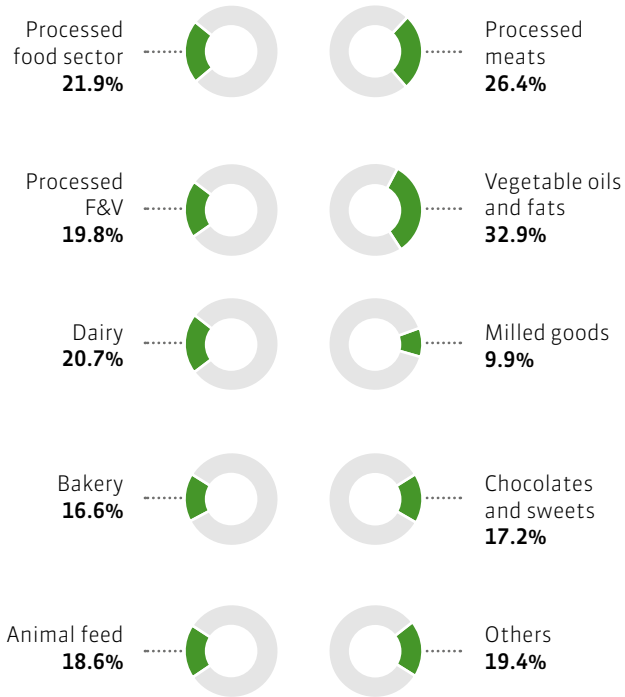
Food processing is a very fertile industrial sector for MSME growth, and MSMEs constitute about 95% of the food processing sector in Jordan. The remainder is taken up by large companies exceeding 100 employees.

In terms of the geographical distribution of MSMEs throughout Jordan, 52% are registered at the Amman Chamber of Industry, 36.5% at the Zarqa Chamber of Industry and 11.5% at the Irbid Chamber of Industry[48].

3.1.2 PROFIT MARGINS, COSTS, UTILISATION OF CAPACITIES, INFRASTRUCTURE

According to the figures provided by the DoS Industry Survey 2015, the profit margins for the individual sub-sectors are estimated as shown in the figure below.

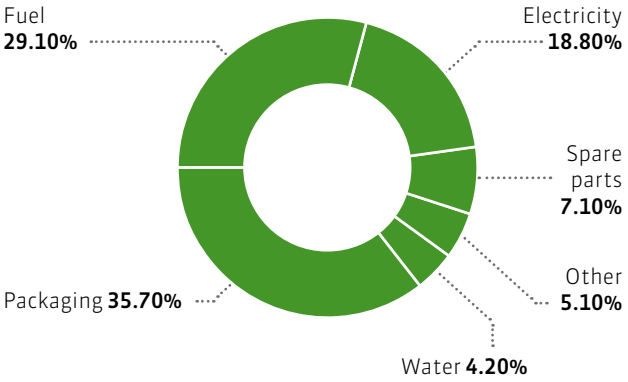
Figure 17:
Net profit margins per sub-sector



47 Ibid.
48 Ibid.

Figure 18:

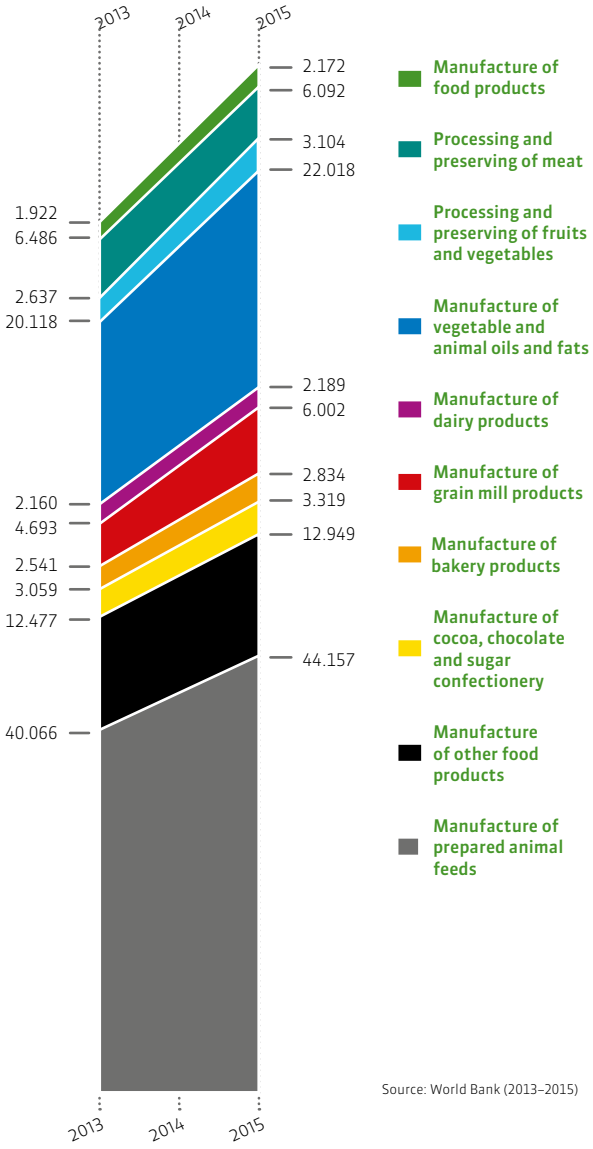
Cost distribution of individual companies in Jordan



Source: Jordan Chamber of Industry (2016)

Figure 19:

Employment figures for the different food processing sub-sectors between 2013–2015



Source: World Bank (2013–2015)

Since profit margins are linked to the performance and management of individual companies and not necessarily to the sector performance, they may not reflect the actual situation within the sector on the macro level.

The recent update of production costs effected by the JCI (Figure 18) gives a more general idea of the relevant cost parameters and highlights the cost of energy (fuel, electricity and water), which comprises in excess of 50% of production costs excluding raw materials. This applies in all food processing sub-sectors, with small variations, and strangely enough seems to be influenced by the sector turnover, judging from the DoS 2015 figures on intermediate consumption – the larger the turnover, the lower the impact. This could imply that the problem of energy costs is caused not only by the increase in the cost of fuel and electricity, but also by the non-optimal utilisation of those resources by small and medium businesses. The recommendations provided in chapters 4 and 5 will tackle the issue of optimisation.

Furthermore, according to World Bank data, the gross national income (GNI) in Jordan in 2017 was USD 3,980, while the average world GNI in the same year was USD 10,700 and for the MENA region USD 7,245[49]. This is an indication that Jordan is within the lower brackets for labour income, placing it in a competitive position worldwide, assuming the efficiency of the workforce remains elevated compared to other MENA countries.

Based on the World Bank indicators and the salary and wage expenses obtained from the 2015 DoS industry survey, the employment figures for the food processing sector between 2013 and 2015 can be compared as per Figure 19 above.

From the 2015 figures and the chart, the biggest employer seems to be the bakery sub-sector (including bread-making bakeries), where wages cover around 9% of the overall manufacturing costs including raw materials. The sub-sector that seems to show the biggest increase in the number of workers within the period (around 55%) is the dairy sub-sector, where wages represent 5.7% of the overall manufacturing costs. This is in line with the growth rate of this sub-sector.

Furthermore, based on the 2015 DoS industry survey, expenditure on advertising and publicity represented

49 GNI per capita, Atlas method (current USD). Source: World Bank national accounts data, and OECD national accounts data files.

around 0.23% of total manufacturing costs, which seems to be consistent across all the sub-sectors. This reflects the relatively low investment in marketing activities that is pursued by the food processing sector in general; this needs to be addressed, as processed food should not be treated as a commodity where price is the main selling factor.

3.2 SUB-SECTOR CHARACTERISTICS

3.2.1 PROCESSED FRUITS AND VEGETABLES – PRIORITY SUB-SECTOR

Products	Tomato concentrate and chopped and peeled tomato canned or in Tetra Pak, canned vegetables, dried tomatoes, dried/ stuffed dates, dried figs, dried grapes, dried apricots, vegetable pickles, pickled cucumbers and gherkins, canned olives, frozen vegetables, frozen fruits, fruit jams and preserves, tomato ketchup and sauce, molasses, real potato chips, vinegar, other food preparations[50].
Estimated number of companies	182
Average number of employees	44

Jordan's F&V are mainly grown in the Jordan Valley, the Ghor of Karak and Mafraq, on farms of which 60% are smaller than 3 hectares

Major types of vegetable produced are: tomatoes, cucumbers, eggplants, peppers and squashes. Types of fruit: olives, citrus, dates, apricots, stone fruits and bananas.

Jordan presently has a comparative advantage in the F&V sub-sector as it has the capacity for self-sufficiency, and a surplus for export and for processing as well as a climate that allows year-round cultivation. Exports of fruits and vegetables have reached a value of 587,000 tonnes while imports are in the vicinity of 226,000, 80% of which are fruits (mainly apples, banana and mango)[51]. On the other hand, Jordan has only about 6% arable land for agriculture and faces significant scarcity in water resources compared to neighbouring countries; this will limit further demand (growing population, increase in exports) and necessitate the introduction of improved agricultural technologies or otherwise resorting to importing raw materials in the future.

A large share of the land in these two areas devoted to the cultivation of F&V is irrigated with water supplied by the government from dams and other water works. F&V Land productivity in these two areas has declined in recent years as a result of decades of intensive farming and continuous irrigation. Traditional canal irrigation systems are being replaced with water-efficient systems and so salinity problems should decline. However, intensive use of the land is likely to continue, especially given that Jordan's horticultural exports are expanding. The development of the F&V processing sector in Jordan both influences and is influenced by the development of the agricultural sector. The surplus of F&V is not necessarily suitable for processing as the quality of sold in the fresh market does not always match the quality needed for processing. The processing sector's annual production as per 2016 figures is around USD 115 million, of which 41 million is exported to various regional countries[52].

An example of an F&V value chain with a strong industrial segment is the tomato and processed tomato value chain, which produced around 837,000 tonnes of tomatoes in Jordan in 2017[53]. There are three main factories producing double- and triple-concentrated tomato paste (hot and cold break treatment):

1. AMPCO, with a daily capacity of 1,500 tonnes of fresh tomatoes per day.
2. SHAFA, cap. 750 tonnes daily.
3. MAFICO, cap. 150 tonnes daily; all factories are state-owned looking to be privatised.

The schematic of the processed tomato value chain is illustrated in Figure 20.

MAIN ACTORS

Upstream

- Farmers: The sub-sector is characterised by relatively small producers who, due to lack of other options, are required to sell their produce through municipal wholesale markets. In general, producers tend to gradually improve their production technology, while maintaining their relatively traditional post-harvest practices. Their production is largely supply-driven, while the current marketing system does not induce improvements with regard to produce quality[54].

- Microbusinesses: Informal HBBs operating in dates, dried fruits, cooking and preserving some jams, pickles and prepared meals, which they can

50 See Annex 7.5 for the corresponding HS codes.

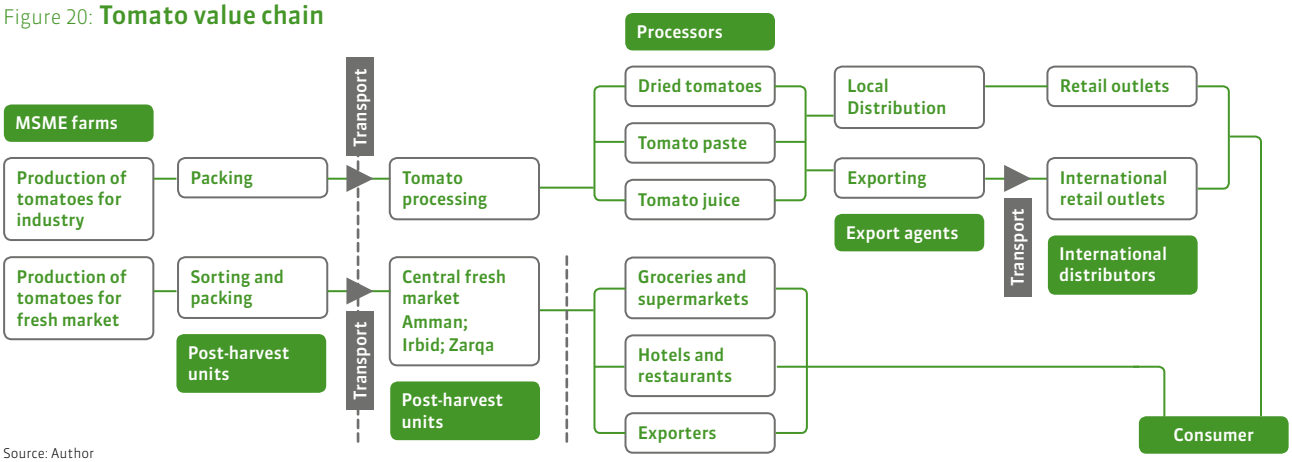
51 Ministry of Agriculture: Annual Report 2017.

52 FAOSTAT 2017.

53 Ibid.

54 ILO (2014): Report on value chain analysis. The tomato sector in Mafraq Governorate, Jordan.

Figure 20: **Tomato value chain**



Source: Author

sell in neighbouring villages or directly to friends and neighbours.

- Aggregators: Mainly taking fresh tomatoes to the market, or sub-contracted by factories for a regular supply.

- Processors: Mainly medium to large factories with automated equipment. Reliant on the tomato surplus and do not coordinate with farmers on quality improvement.

Downstream

- Local distributors and retailers.
- Hotels and restaurants.
- Exporters/agents to regional and international markets.

MSME PRODUCTION

Products (see figure above): F&V processing industries are mainly distributed in the Amman region, Mafraq, Irbid and the "Al Ghor" region. Tomato processing and canned food factories are considered large companies (over 100 employees including seasonal peaks); other companies dealing with pickled vegetables, jams and jellies, dried fruits and dates are considered medium (such as BASITA) and then there are the microentities. The sub-sector grew at an average rate of 4.9% annually from 2013 to 2016[55]. Canned olives, another important category, are analysed within the sub-sector of vegetable oils.

The growth factors are mainly related to the increase in consumption as a result of population growth and the flow of refugees; but they also emerge from the proliferation of small and medium Syrian refugee processed food producers/businesses, whether formal or informal.

Gross margins[56]**:** The sector in 2016 had a gross profit margin of 29.42% based on an ex-factory output with an equivalent value of USD 162 million[57]. Energy (fuel, electricity and water) constitutes about 52% of all intermediate consumption costs excluding raw materials[58].

Raw materials: The main raw materials are fruits (apricots, figs, peaches, apples, tomatoes, dates, olives) and vegetables (eggplant, squash, potato) which are locally supplied. Nevertheless, Jordan annually imports in the vicinity of 10,000[59] tonnes of tomato paste, mainly from Turkey but also indirectly from China. The average cost of imported tomato pastes in 2017 was USD 1,000/MT, while Jordan exports tomato paste and other tomato products at an average of USD 1,300/MT[60]. Raw materials constitute about 89% of the total production costs according to the DoS calculation of intermediate consumption in 2017.

Packing materials: Packaging constitutes an important part of the product cost. It is generally estimated at an average of 35% of the total production cost, excluding the cost of raw materials[61]. It comprises primary and secondary packaging, the cost of which depends on the cost of international commodities.

Part of the primary packaging is fully imported, such as glass jar caps and Tetra Pak cartons, while the rest is produced locally from imported raw materials, such as tin cans and flexible plastic packaging.

55 DoS 2016.

56 Gross margin means all gross factory outputs minus all expenses on raw material, packing material, consumables and services, excluding distribution and trade margins.

57 Calculated from DoS 2016 figures.

58 DoS 2016.

59 DoS 2017.

60 Ibid.

61 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

1. Glass jars: Mostly imported from China; but also from Turkey, Egypt and KSA.

2. Tin cans: Tin cans of different sizes can be purchased from companies, such as SILGAN, operating in Jordan. These companies supply all of the needs of F&V companies. Still, imports are possible from KSA, Egypt or Turkey at competitive prices.

3. Flexible plastic packaging: Mainly used for dates and dried fruits. Flexible packaging used for cheeses is imported but printed and formed in Jordan.

4. Tetra Pak for products like tomato paste, hummus or baba ganoush are all imported from KSA or Austria.

Secondary packaging such as corrugated cartons and shrink film is sourced from Jordan through companies like JCC, Q-pack or Zalatimo.

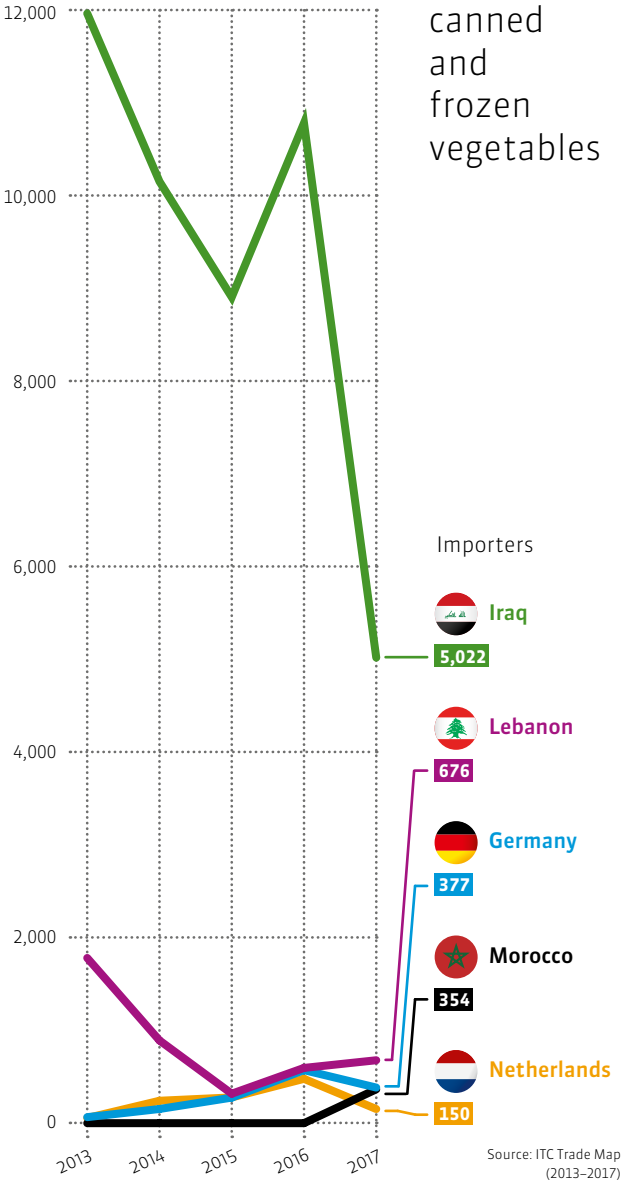
Production process: Most of the large factories dealing with tomatoes and canned food are modern and well equipped (Kasih, Ampco). Medium and small producers vary from semi-automatic to automatic (Al Durra). While factories producing vegetables preserved in vinegar tend to be more numerous, they are smaller in size and less automated.

Quality: The minimum food safety system for canned F&V by law is good manufacturing practice (GMP). Large factories have ISO 22000 or FSSC 22000 certification in order to facilitate their international market access. All medium and large factories are equipped with quality control systems, including laboratories and skilled staff. Companies however lack awareness of quality requirements, especially for the international market. All factories are controlled by JFDA inspectors, who should be able to provide this information.

Human resources: The processed F&V sector offers a great opportunity for female participation in the workforce, whether unskilled or skilled, as it requires a lot of manual labour but also university education. Furthermore, for industries such as pickling, date processing and RTE food products, it allows the establishment of small production entities near agricultural areas, which facilitates access to the rural population. Even though the general rate of female participation in the industry is around 15%, at Al Durra in 2017 over 50% of the workforce as well as three out of five food experts were women[62]. Ideally,

Figure 21:

Trends for the five major importing markets for Jordanian canned and frozen vegetables (in USD thousand), 2013–2017



women should be able to attend vocational schools to upgrade their skills. However, for those who have time constraints due to other social duties (family and children), special institutions should be able to organise and provide learning opportunities for women within convenient hours.

MARKET ACCESS

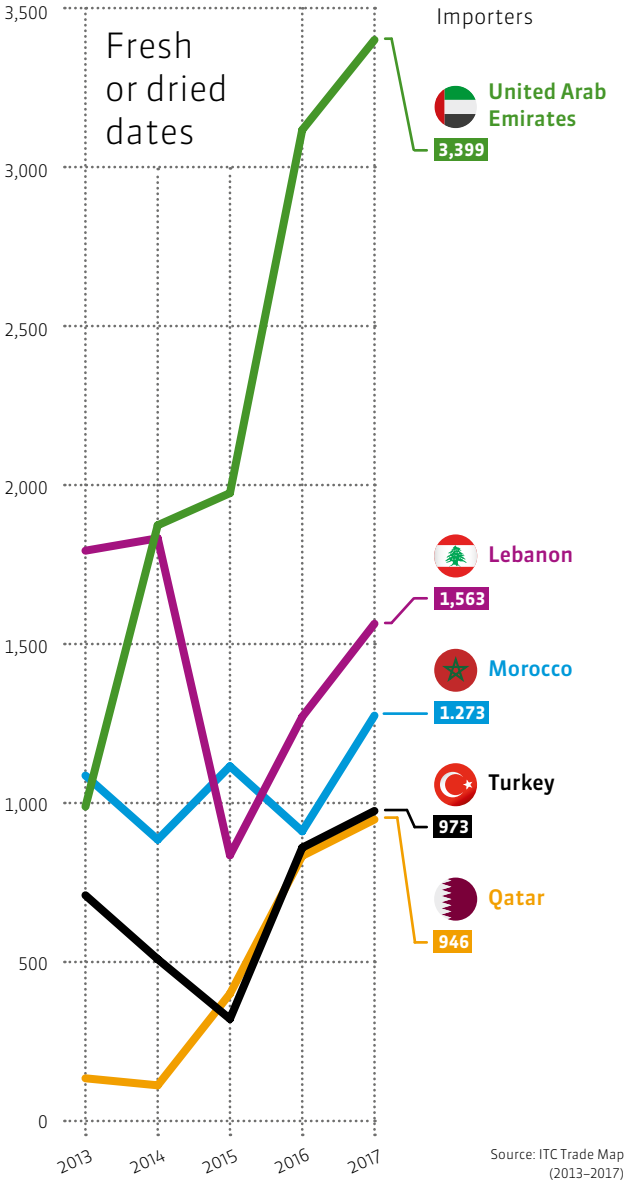
Local market: At present, the Jordanian processed F&V sector depends much more on the domestic than the export market. Local consumption was roughly estimated at 150 million in 2017[63]. Local production

62 Alhajahmad, S., Lockhart, D. (2017): Jordan's Recent Economic Performance: Implications for Future Growth, Investment. Published by: WANA Institute, Royal Scientific Society in Amman, Jordan.

63 Calculated from the addition of imports to local production and subtracting from its exports. All figures obtained from DoS data of 2017.

Figure 22:

Trend of the five major importing markets for Jordanian dates (in USD thousand), 2013–2017



does not cover all consumption needs. Around 40% of processed F&V is imported. Imported processed vegetables, including tomato paste, are either canned or frozen. Imports do not include spices and mixed spices, which account for USD 33 million, or herbals, with a value of USD 3 million; spices are also addressed under sub-section 3.2.10 Products like tomato paste are sometimes imported when local production is not enough because local farmers are focusing mainly on raw materials for the fresh market.

Export market: Exports in 2017 reached a value of USD 41 million[64], excluding items such as thyme mixtures, with a value of USD 5 million, and dried dates (about USD 9 million). The export value is an accumulation of the various F&V processed products, without any leading product. Products such as processed tomatoes showed a downward trend from USD 3 million in 2013 to 1.4 million in 2017[65]. The main reason is that Jordan's main markets have been dominated by more competitive products from China, Turkey, UAE and KSA.

In 2017, Jordan exported about USD 16 million of other canned or frozen processed vegetables, 70% of which were destined for Iraq. The other major markets were Lebanon, Germany, Morocco and the Netherlands. Figure 21 illustrates the trend for this item. The Iraqi market regressed from USD 16 million in 2013 to USD 7 million in 2017. It is not very clear why the Iraqis are shifting away from buying Jordanian, but the most plausible explanation would be the price–quality ratio, which seems insufficient to render Jordanian products competitive in relation to other regional and EU suppliers such as Italy and Portugal.

The date export market, on the other hand, has been increasing on a regular basis since 2013, mainly because Jordan is increasing its production of good-quality dates (Mejdool), and is contributing to the already growing international market.

Figure 22 shows the trends of the five major markets for Jordanian dates between 2013 and 2017.

Main export partners by rank: Gulf countries (UAE, Qatar), Lebanon, Morocco and Turkey.

Technical requirements for market access related to processed F&V: The Arab markets require compliance with the principles of the Codex Alimentarius[66] in terms of general food safety (microbiological and chemical contaminants) as well as labelling requirements for pre-packaged food, in addition to specific product standards whenever relevant. GCC countries follow standards listed by the GCC Standardization Organization (GSO)[67]. EU markets require compliance with EU food safety and process regulations in food, which can be found on the website of the EU Trade Helpdesk[68]. Large commercial chains also require more stringent food safety certification such as BRCGS[69] or International Fire Consultants (IFC)[70]. The US market requires Food and Drug Administration (FDA) approval for certain processed F&V based on

64 ITC Trade Map 2017.

65 Ibid.

66 FAO/WHO, Codex Alimentarius, http://www.fao.org/fao-who-codexalimentarius/codex-texts/list-standards/en/.

67 GCC Standardization Organisation, https://www.gso.org.sa/store/gso.

68 EU Trade Helpdesk, http://trade.ec.europa.eu/tradehelp/.

69 BRC Global Standards, https://www.brcglobalstandards.com/.

70 IFC Certification, http://www.ifccertification.com/.



their composition. It also requires documented compliance with HACCP-based GMP and FDA food safety, labelling and nutritional information regulations[71]. Large commercial chains require compliance with the Global Food Safety Initiative (GFSI)[72], which imposes as a minimum the FSSC 22000 standard.

Market barriers and major competitors: The price competitiveness of processed F&V products compared to regional competitors is the major barrier for trade. Lack of sufficient processing quality and raw materials contributes to the price increase of the processed product; this is the case for tomatoes and dried fruits for example. Although entry to developed markets is easier in such sub-sectors compared to sub-sectors of animal origin, for instance, there is a minimum requirement in quality infrastructure that most Jordanian MSMEs are not able to comply with, such as BRC and FSSC 22000.

As regards export markets, major competitors are:

- Processed tomatoes: Turkey and China.
- Dates: UAE, Iran, Iraq, Algeria, Israel (the latter using Jordan Valley as an advertising theme), KSA, and Egypt.

Potential market opportunities: The markets with greatest export potential for Jordan's vegetables preserved by vinegar or acetic acid are Iraq, the US, KSA and Kuwait[73].

As far as tomato paste is concerned, the largest potential seems to be in the domestic market where, in addition to what is locally produced, over 10,000 tonnes of concentrate are being annually imported. Major export markets are Iraq and Palestine. Developing a more complex product portfolio could revive processed tomato exports in the future.

In countries such as the US and Canada, and some EU countries, there is an unmet demand for prepared products based on vegetables or fruits such as jams, hummus and other vegetarian RTE food products. These fall under the sub-sector "other food products".

The development of the processed date industry looks promising as per a study conducted by JEDCO[74], especially since a lot is being done to increase production of the famous Mejdool-type dates, which could significantly increase exports of dates to European countries (currently the largest European markets are: Poland, UK, France, Switzerland and Germany). Regional countries identified by the study as high-potential markets are UAE, Morocco, Qatar, Kuwait and Turkey. The actual export value for dried dates is around USD 9.8 million. Large competitors in the potential markets are Israel, UAE and KSA, followed by Algeria (for European markets) and Iran for the Levant market. Egypt is an important regional exporter as well and can be considered as a potential competitor to Jordan taking into consideration that Jordan and Egypt have both signed the Agadir agreement with Morocco and Tunis in addition to a special bilateral agreement with Jordan.

71 US Food & Drug Administration, https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm.

72 Global Food Safety Initiative, https://www.mygfsi.com/about-us/about-gfsi/what-is-gfsi.html.

73 ITC potential market analysis.

74 JEDCO, export opportunities for Jordanian dates, July 2018.

Case study: Ghor Safi women's homemade innovative food business

The homemade sauces idea came from Dalal Obaid, a local resident of Ghor Safi in Jordan who in 2017 began to realise the agricultural potential of her area. The project includes 44 women who prepare products such as dried tomatoes, pastries, desserts and low-salt pickles in their own kitchens. Obaid, who had been working in the exports and management field at a consulting firm for 15 years, explained:

"I knew that motivation was not enough and that I needed to design an organised, systematic and specialised work formula", she remembered, adding that she decided to start **a professional training programme** that would help local women start **"on sound and solid ground"**. To fund the training, she applied to the USAID Jordan Local Enterprise Support Project grant programme that aims to support HBBs in local communities.

In 2017, Obaid launched her training programme and the women of Ghor Safi started receiving courses in **food safety and hygiene**, in which they were acquainted with the **highest international quality standards**. A year later, they began producing their innovative line of tomato sauce and pesto,



offering a much more valuable product on the local market (see Annex 7.6 for the whole story).

Source: The Jordan Time (2018)

Jordan has preferential customs tariffs agreements with all the potential markets mentioned.

INNOVATION

Innovation is mainly related to the introduction of new products, for example kamareddine, traditionally a Syrian product which has been introduced by the Al Durra company.

Dried dates in fantasy packaging and stuffed with nuts are solicited in many countries, especially developed ones, due their nutritional benefits.

Some SMEs and NGOs have developed brands such as "Tuneib" or "Jordan River" that rely on microenterprises, and especially women working in these contexts, to develop speciality products to be sold as homemade.

Using e-commerce to sell pre-packaged dried or stuffed dates is a promising method to reach export markets quickly and without heavy investment.

Above is an example of a home-based microenterprise that turned into a successful company as a result of the guidance and training provided[75].

PRODUCT SCOPE AND DIFFERENTIATION

Product scope analysis helps determine the dried dates product position in terms of complexity, variety and value addition. Product differentiation based on price competitiveness can be used to compare the Jordanian products to those of regional competitors for the same sub-sector (refer to Annex 7.8).

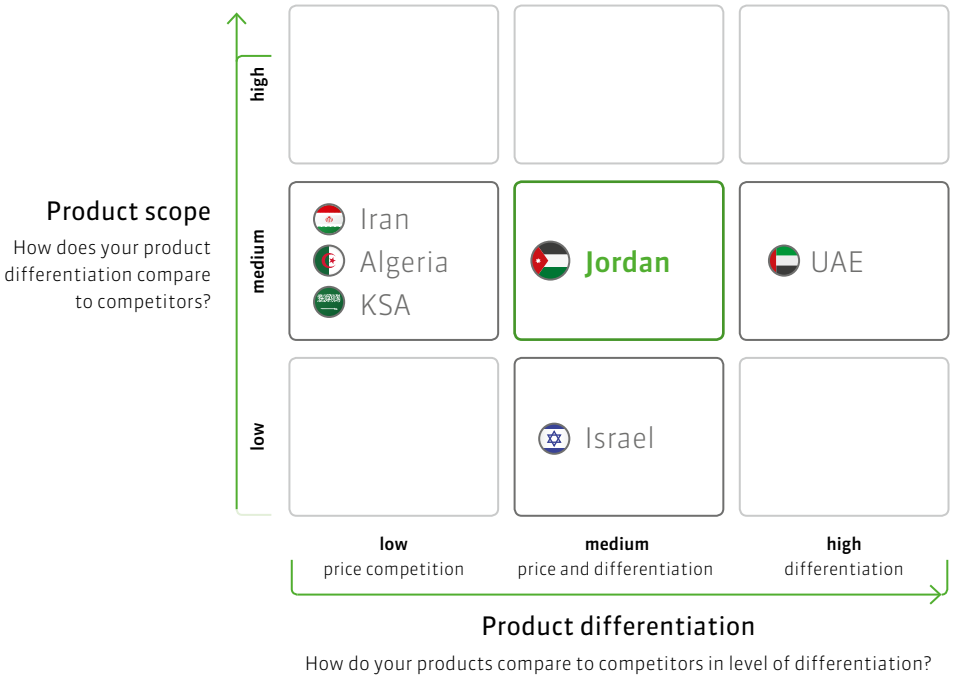
Jordan has an important opportunity in Turkey, Morocco, Qatar and EU markets. The increase in quantities of dates, especially the Mejdool variety, positions Jordan as a potential competitor to the Israeli dates that are advertised as coming from the Jordan Valley – an important untapped potential which should be explored.

At present, Jordanian dried dates have no advantage, being positioned as a low-priced, low-complexity product similar to the Iranian, Saudi, Algerian or even some UAE dates, which are mainly directed towards low-income countries. However, there could be untapped potential in certain African countries already served by the UAE.

It is recommended to target EU markets served by Israel, as these markets are known takers of dates (Israel exports annually over USD 150 million to EU countries); the leverage of Jordanian products in those markets will be in offering a larger range of products covering low-complexity to highly sophisticated products within the Arab sweets sector. African markets offer good potential and should be developed in the medium to long term, since the middle-class segment of African societies is increasing. The UAE's experience selling about USD 37 million of dates annually to African countries including Morocco is encouraging.

75 The Jordan Times (2018): Turning tomatoes into money. Ghor Safi women's innovative food business. 10 June. http://www.jordantimes.com/news/local/turning-tomatoes-money-ghor-safi-women%E2%80%99s-innovative-food-business. See Annex 7.4.

Figure 23: **Product scope and differentiation for dried dates**



UAE: Medium pricing; medium variety.
KSA: Low pricing; medium variety.
Iran/Algeria: Low pricing; low complexity.
Israel: Medium pricing; low complexity.

Product differentiation: Price Competitiveness; Product Scope: Natural Resources

Source: Adapted from ITC (2018)[76]

MAJOR SUB-SECTOR CHALLENGES AND RECOMMENDATIONS

Challenges:

- Producers do not have consistent access to low-priced raw materials suitable for industrial production.
- Small and sometimes medium production facilities are lacking adequate international-level food safety management systems.
- The need for diversification of the product portfolio and the introduction of novelty products to avoid high competition from regional players producing the same traditional items.
- The development of low cost, environment friendly packaging materials such as flexible packaging.
- Continued closure of some regional markets such as Iraq and Syria as a result of political instability is compelling producers to look for replacement export markets.

Recommendations:

- Develop contractual agreement mechanisms that are user-friendly to both farmers and industry for the supply of industry-specific crops such as dried tomatoes, tomato paste, frozen potatoes, dates for drying, olives for canning, figs for drying.
- Intensify training of production and Quality Assurance staff on basic food safety principles to meet the ongoing requests from international markets for high-level certifications such as ISO 22000, FSSC 22000, BRC.
- Support research and development (R&D) for both product and package development to speed up product diversification and development while preserving quality and shelf life.

76 Based on Trade Map statistics in Annex 7.7.



3.2.2 DAIRY – PRIORITY SUB-SECTOR

Products Pasteurised milk, powdered milk, drinking yoghurt, eating yoghurt, labneh, butter, cheese, ice cream, shannenah, jameed

Estimated number of companies	192 registered; of which about 21 are modern	**Average number of employees**	17.8

Fresh milk in Jordan is mainly produced in the northern segment of the Jordan Valley (the Al Ghor region) known for its warm and humid climatic conditions. It is the nation's most fertile region, characterised mainly by small-scale farms (1–10 cows)[77]. The smaller number of animals can reduce the risk of diseases caused by the warmth and humidity.

The eastern part of Jordan, in the Al Duhlel region, concentrates Jordan's intensive production systems, established within large-scale farms with zero grazing, since the area is semi-arid[78]. Dairy farming basically depends on concentrate feeds (maize, barley, soybeans, wheat bran). Animals are also fed on high-quality wheat straw and alfalfa hay. In 2017, there were 559 operating dairy farms, excluding microenterprises[79].

According to the 2017 statistics from the Jordanian MoA, Jordan produced about 485,000 tonnes of fresh milk, consisting of 75% of its yearly consumption of 650,000 tonnes. Consequently, Jordan imported the equivalent of about 164,000 tonnes. DoS 2016 figures refer to a total of 380,000 tonnes of fresh milk of which 276,000 tonnes is cow milk (73%) and 104,000 tonnes sheep and goat milk (27%).

Jordan produces about 35–45 litres of milk per capita, while the domestic milk consumption demand was equivalent to about 65 litres per capita in 2017[80]. In the same year, the country imported about 31,000 tonnes of powder milk of all types and re-exported 123 tonnes in the form of sweetened powder milk. The high feed-to-milk ratio, added to the average yield of milking cows (inadequate feed mix, hot climate, diseases) and the fact that many farms are micro and small, makes raw milk more expensive when compared to milk obtained from imported powder milk. Consumers and industries compensate by buying imported milk powder and/or imported ultra-high-temperature (UHT)-treated milk from KSA. Fresh milk is used to produce higher-added-value dairy products like cheese.

Sheep and goat milk products are usually the exportable products. Some cow milk products, such as cheese, are sold to regional countries.

Dairy products are generally yogurt and cheese (halloumi type). Milk in bottles or packages is available on the local market, but highly priced, as it is pasteurised[81].

The shelf life of dairy products depends on the respect that is paid to cold-chain requirements. Larger dairies are well equipped and consequently have a large reach, while smaller dairies have fewer

77 Alqaisi, O., Ndambi, O.A. and Hemme, T. (2009): Development of milk production and the dairy industry in Jordan. Livestock Research for Rural Development. 21 (107). http://www.lrrd.org/lrrd21/7/alqa21107.htm.

78 Ibid.

79 Ministry of Agriculture: Annual Report 2017.

80 Ibid.

81 Soliman, I. and Mashhour, A. (2012): National agro-food policies in Jordan. Published in: SUSTAINMED Project – D09 / WP2T2, Report on global and sectorial policies in the MPCs and in the EU. WP2T2: A review of the national and international agro-food policies and institutions in the Mediterranean Region. Synthesis (11 October): pp. 251–328.

resources and are geographically limited. The cold chain is not always respected in retail.

The schematic of the dairy products value chain is illustrated below (Figure 24).

Dairies in Jordan come in various sizes and types: labneh, yogurt and white cheese are traditional (artisan) homemade products and consequently there is a multitude of home-based dairies. Though there is proven market potential for this type of product, lack of knowledge about hygiene, technology, marketing, price finding, financing and other factors hinders the expansion of this type of operator.

MAIN ACTORS

Upstream

- Farmers: Including shepherds/goatherds, small dairy farms (5–20 cows), medium dairy farms (20–500 cows) and large dairy farms (500+ cows). Large-scale farms are owned and operated by major Jordanian dairy companies. Small- and medium-sized farms and shepherds/goatherds may have an annual contract with major Jordanian dairy companies, but are more likely to have their own shop for processing and direct sales or an established relationship with a small dairy processor/shop. A typical medium-sized dairy company in Amman might work with 75 farmers on a contract basis. In addition, some small farmers and herders sell fresh milk at wholesale prices directly to home-based dairy processors[82].
- Intermediaries: Parties which buy and collect milk from small farmers and sell it to industry as well as to small producers.
- The Breeders Association: Body helping to market milk by collecting it from farmers and selling it to industry, especially in regions such as Mafraq and Irbid.
- The dairies: small- (home producers), medium- and large-scale modern industries (83 licensed factories[83]). The latter utilise over 90% of the raw milk produced.

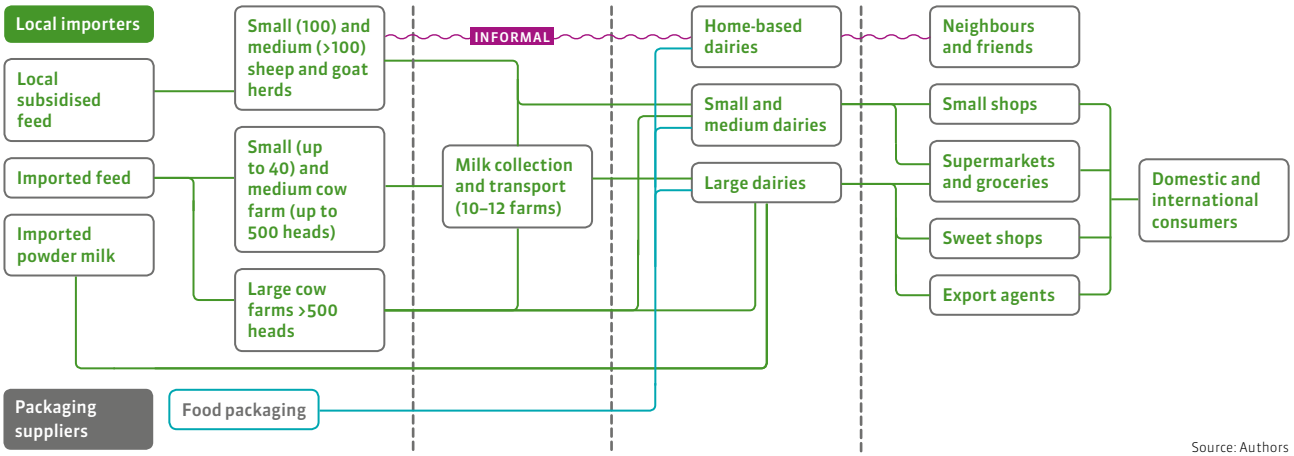
Downstream

- Small retailers: Small shops and groceries.
- Large retailers: Supermarkets and hypermarkets.
- Hotels and restaurants: Buying dairy products in catering quantities.
- Large dairies' export agents.

Supporters:

- Animal feed suppliers: Animal feed importers, producers, and farmers selling crops.
- Chilled raw milk transporters: Owners of chilled sanitary tanks that are used for collecting the milk and transporting it to the end-user without being spoiled.
- Packaging suppliers: Providing small and large recipients with glass, plastic and carton for milk, laban, labneh, cheese and so on.
- Accredited laboratories.

Figure 24: **Value chain for dairy products**



Source: Authors

82 Mercy Corps (2017): Market System Assessment for the Dairy Value Chain. Irbid & Mafraq Governorates, Jordan. https://data2.unhcr.org/en/documents/download/62006.

83 Data based on a workshop on the dairy industry at the Jordan Chamber of Industry 2018.

MSME PRODUCTION

Main products: Pasteurised and UHT milk, drinking milk, yogurt, labneh, jameed, various white cheeses like halloumi and akkaoui. Dairies in Jordan can be divided into large modern factories, such as the Hammoudeh dairy factory, or medium and small factories relying on manual or semi-manual systems, such as the dairy shops which are scattered all over the country. Farm-made or home-made products are also important as they are produced on small farms from cow milk and serve clients in their localities. Most shepherds and goat herds specialise in products such as jameed and white cheese[84]. Although there is evident market potential for this type of product, lack of knowledge about hygiene, technology, marketing, price finding, financing and other factors hinders the expansion of this type of operator.



Small- and medium-scale dairies producing drinking milk, yogurt, drinking yoghurt, jameed, cheese and other products constitute around one-third of the dairy sub-sector. During the assessment, certain companies estimated their productivity at between 50% and 60% of their capacity. This is explained mainly by the current lack of access to the Iraq market as a result of the ongoing unstable situation there. The domestic market share of MSME dairies is also declining. One reason that was mentioned for this was the impact of low-cost imports from KSA. In 2017, Jordan imported around 12 million litres of drinking milk from KSA alone. Around 90% of the fresh raw cow milk produce goes to the dairy factories located near Amman, which are modern and well equipped. The rest is informal milk utilised by small farmers for their own use or for feeding the calves.

Raw materials: The main raw material for dairy products is fresh milk, and it is the main internal cost driver. Largely, it is cow milk, but there are also good quantities of fresh sheep and goat milk from which the famous Jordanian jameed is produced. Cow milk products such as yogurt are available year-round, while sheep and goat milk products, such as cheese and jameed, are available from February through August.

Powder milk is another raw material used in the dairy industry, although officially it is not allowed in dairy products. The ratios of fresh milk to powder milk utilised are difficult to estimate because of the informality of procedures. Cheese and jameed are mostly produced from fresh milk, while powder milk gives good results with yoghurt and labneh, desserts and ice cream. Powder milk is utilised in order to compensate for lacks in fresh milk availability and to enhance the quality of the fresh milk in terms of protein and fat content. Also, reconstituted powder milk usually costs less than fresh milk.

Packing materials: Primary packaging constitutes a very important quantity in the dairy sub-sector. It mainly comprises glass bottles, plastic cups for labneh and Tetra Pak films. Except for the Tetra Pak films, which are outsourced from KSA, all items are sourced from Jordan.

Flexible packaging used for cheeses is imported but printed and formed in Jordan.

Secondary packaging: Corrugated carton – sourced from Jordan through companies like JCC, Q-pack or Zalatimo.

Gross margins: The dairy sub-sector has performed according to official figures at a 32.4%[85] margin based on ex-factory output of 520million USD, making it one of the best-performing food processing sub-sectors.

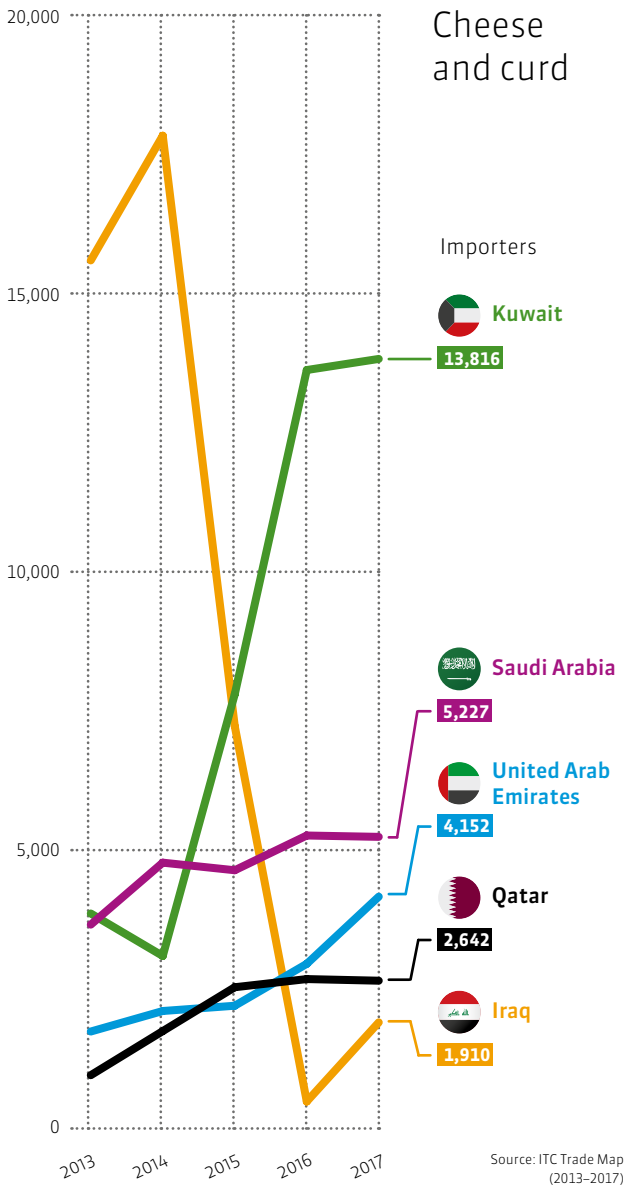
Production process: Most small producers follow traditional methods of production; operations are manual or semi-automatic and hygiene is sometimes questionable. Large factories are modern, automated and adapted to larger economies of scale, reducing the over-processing of milk.

At present, cow milk has an average cost of JOD 0.35 (USD 0.49) and sheep milk JOD 0.45 (USD 0.63). The relatively low price of sheep and goat milk can be explained by the government's subsidy on feed for herd farming. Packed UHT milk from KSA (Nadec) or Kuwait (KDD) is sold on the Jordanian market cheaper

84 Alqaisi, O., Ndambi, O.A. and Hemme, T. (2009): Development of milk production and the dairy industry in Jordan. Livestock Research for Rural Development. 21 (107). http://www.lrrd.org/lrrd21/7/alqa21107.htm.

85 Calculated from DoS figures 2016.

Figure 25: **Trends for the five major importing markets for Jordanian cheese and curd (in USD thousand), 2013–2017**



than or at around the same price as similar Jordanian products. The cost of production in KSA is lower due to economies of scale, and in Kuwait it is permitted to use reconstituted powder milk. Nevertheless, MoA sources claim that during peak season, a surplus of 90,000 litres of raw milk is being sold at lower cost or wasted on a daily basis. Imports of UHT milk and particularly powder milk, in addition to the higher production costs of raw milk in Jordan, are the root cause of this situation.

Quality: The minimum food safety system for dairies by law is HACCP. Large factories have ISO 22000 certification in order to facilitate their export market access. All medium and large factories visited by the project consultants are equipped with quality control systems.

Human resources: Starting from the farm level, the dairy sub-sector opens up opportunity for women. Traditionally, on small farms women share the responsibility for animal care and milking tasks. In modern factories, women play an important role in the manual packaging of products like labneh and cheese, and are dominant in laboratory and quality control work[86].

MARKET ACCESS

Local market: Dairy products worth about USD 515 million[87] are consumed annually through supermarkets, small shops or onsite production outlets in the form of drinking milk, labneh and cheese. About USD 372 million of this sum comes from local production as per 2016 DoS figures[88].

Export markets: In 2017, Jordan exported dairy products worth around USD 32 million to about 25 countries. The top-two destinations were the US, with USD 840,000 (mainly limited to jameed) and Kuwait, with USD 13 million (mainly white cheeses). KSA was placed third, with an estimated USD 5 million, followed by Iraq (USD 2 million) and the other Gulf countries, with exports mainly limited to white cheeses[89]. Jordanian products usually enter export markets through local agents and distributors.

Export values for Jordanian white cheese products have been fluctuating in the past five years and now show a decreasing trend. Figure 25 shows the export trends for the five major markets for Jordanian cheese. Exports to Iraq have plunged significantly since 2013 from USD 15.5 million to 1.9 million in 2017, due to the ongoing conflict in the region.

Jordan's main competitors within the mentioned markets are Egypt, KSA, Turkey and Bahrain at the regional level, and Denmark, France, Germany and the US at the global level.

Technical requirements for market access: All countries require that companies exporting animal-based products have an HACCP certification such as ISO

86 Shatanawi, M., Naber, S., Al Smadi, H., and Al Shneikat, G. (2007): The participation of Jordanian women in food security and food production. In: Sagardoy, J.A., Lamaddalena, N., Quagliariello, R., Chimonidou, D., Guelloubi, R., Pinca, V. (eds.). Mainstreaming gender dimensions in water management for food security and food safety. Bari : CIHEAM, 2007. pp. 83–96 (Options Méditerranéennes : Série A. Séminaires Méditerranéens; n. 77).

87 Estimated from DoS figures on 2016 and 2017 exports and imports.

88 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

89 ITC Trade Map statistics 2017. See Annex 7.7.



22000 or FSSC 22000 food safety management systems. As a rule, the EU countries, the US, Australia and several other countries do not allow imports of dairy products except from countries they have listed as approved. Jordan is still not among such countries in developed markets.

In some cases, Jordan can export jameed to the US under special licence.

All other conditions correspond to the requirements indicated in the section on processed F&V market access, except for specific standards linked to particular types of product and for labelling and nutritional labelling requirements. For GCC countries, health attestation is mandatory for dairy products, showing that they are fit for human consumption and are produced in a facility implementing an HACCP-based food safety management system.

Market barriers: The market barriers are linked to two aspects:

1. A cost aspect due to the relatively high cost of milk compared to international values and some regional countries, due to a high feed-to-milk ratio.

2. Since milk is an animal-based product, it has difficulties adhering to the standards imposed by foreign developed markets; cow milk is practically banned from developed countries such as the EU countries and the US.

Potential markets and opportunities: Jordanian dairy products are by far the leading products in the domestic market; they are priced at reasonable levels (JOD 4.5 for 1 kg of labneh compared to JOD 9 for the Turkish brands such as ULKER); the main growth potential is in cheeses and long-shelf-life processed products such as liquid jameed.

The markets with greatest export potential for Jordan are UAE, KSA and Kuwait for fresh white cheeses. Jordan's closest export links are with Palestine.

Jordan has preferential rate tariffs with most of the high-potential markets.

INNOVATION

During the study, certain innovative activities were identified to stimulate the sub-sector.

- The development of long-shelf-life, ready-to-use liquid jameed in Tetra Pak cartons will provide an added value to the consumer and a more hygienic approach to jameed products, as well as increasing the possibilities for exports to developed countries.

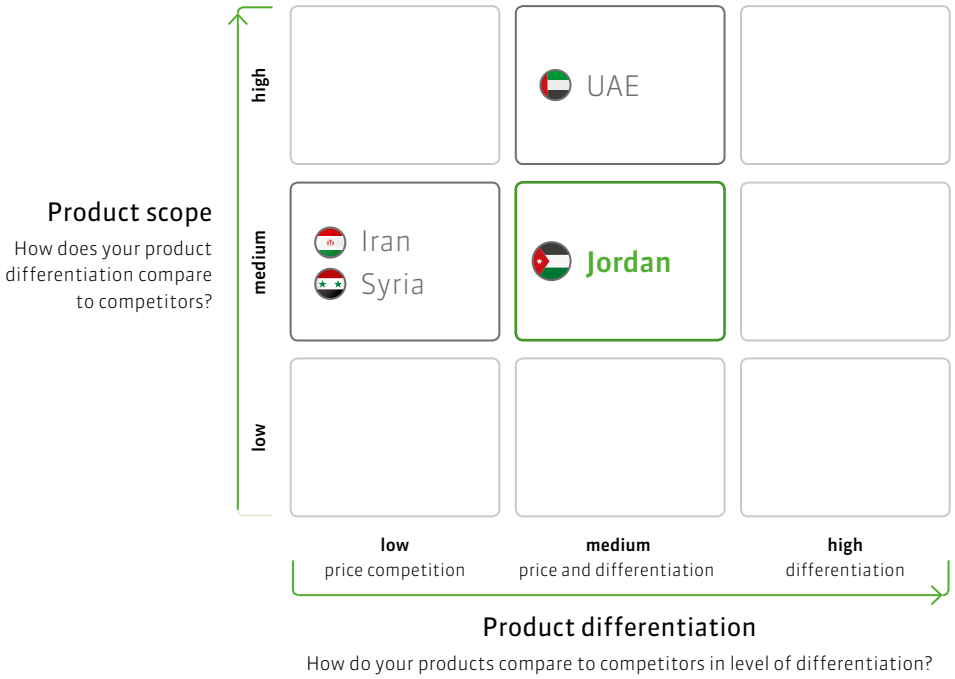
- The increasing of the shelf life of products like labneh in order to address international markets and compete with Turkish products might also require the development or modification of the current Jordanian standards for labneh.

Example:

Some dairy producers are illegally using Natamycin (natural preservative) to make traditional labneh, as it can increase shelf life by inhibiting the growth of fungi. This additive is still not approved by the authorities in Jordan. As a matter of fact, it is still not approved for use in labneh in any country in the region. A study being run by the JCI on behalf of local dairies, is predicted to recommending its approval to the local authorities.

The JCI suggests that powder milk should be legally allowed in dairy products like processed cheeses and flavoured milk, but authorities are fighting it even though many similar imported products contain milk powder. Milk powder is allowed in many countries in low percentages, even in hard cheeses, in order to standardise the quality of fresh milk in terms of total proteins and total fat, if relevant.

Figure 26: **Product scope and differentiation for white cheese**



Jordan: Prices not so competitive, with some variation, mainly in white cheeses.
Syria and Iran: Competitive with a good variation; targeting low-purchasing-power markets.
Turkey: Medium-priced with a higher complexity and added-value products.

Product differentiation: Price Competitiveness; Product Scope: Natural Resources

Source: Adapted from ITC (2018)[90]

MICROENTERPRISES

There are no official figures on the number of micro-enterprises involved in the dairy sub-sector, since the majority operate within the informal sector in Jordan. The figure may be related to the number of small farms that utilise their milk to produce milk products for themselves and to sell in their local area, and many laban and labneh shops can also be considered as micro. Again, however, the number of these establishments is not known, because there is no official count.

In small-scale production, farms have 1–40 cows; goatherds or shepherds may have a few dozen to a few hundred heads. Manual milking techniques are used and fresh milk is sold directly to small-scale processors and dairy retail shops[91]. This reduces the need for sophisticated logistics.

Microenterprises also collaborate in supplying large dairies with intermediary products based on sheep/goat milk, such as labneh and jameed. The collaboration involves the close supervision by larger factories of the quality and hygiene of the products they procure.

PRODUCT SCOPE AND DIFFERENTIATION

The product scope analysis helps determine the white cheese product position in terms of complexity, variety and value addition. Product differentiation based on price competitiveness can be used to compare the Jordanian products to those of regional competitors for the same sub-sector (refer to Annex 7.7).

The improvement of the Jordanian dairy sub-sector in the last 10 to 15 years has encouraged the production of cheeses as a higher-added-value item obtained from fresh milk. Jordanian white cheese exports can only be medium-priced, considering the cost of milk. In terms of variation, Jordanian white cheeses could compete with Syrian products, although these are more competitive overall due to the lower cost of milk.

Turkey is the regional leader in cheese in terms of variation and quality, but the main product varieties differ from Jordan and Syria. Turkey is therefore not able to compete with Jordan and Syria in white cheeses, but it is competitive in the categories of yellow cheeses and cream cheeses.

90 Based on ITC Trade Map statistics in Annex 7.7.

91 Mercy Corps (2017): Market System Assessment for the Dairy Value Chain. Irbid & Mafraq Governorates, Jordan. https://data2.unhcr.org/en/documents/download/62006.

MAJOR SUB-SECTOR CHALLENGES AND RECOMMENDATIONS

Challenges:

- High cost of raw milk due to high feed-to-milk ratio, reflected in the cost of finished products; this limits the product range to products which consume relatively little milk, such as yoghurt, labneh and white cheeses. Items such as yellow cheeses cannot be competitive on the international markets.
- Imported powder milk is replacing high-cost raw milk both in retail and at certain industry levels, despite government rules not allowing powder milk in certain finished products. Jordanian dairies are compelled to compete with countries that do allow the use of powder milk in certain dairy products such as yoghurt and labneh.
- Arbitrary respect paid to the cold chain at the level of logistics and storage reduces the shelf life of chilled dairy products. Bad cold chain management encourages the use of preservatives.
- The high number of micro- and informal businesses could lead to unfair competition with formal businesses at the domestic level.
- Few innovative products are being introduced by companies, although innovation is necessary for the development of high-added-value products.

Recommendations:

- Intensify development of high-added-value dairy products such as cream cheeses, some types of yellow cheeses (cooked mozzarella, Gouda-type cheese), yoghurt with fruits.
- Raise awareness and provide training on the cold chain for all relevant actors.
- Link medium and large enterprises with micro informal businesses to assure synergy instead of unfair competition.
- Review the rules on the use of powder milk in industry, working towards a more down-to-earth approach whereby use of powder milk is allowed to standardise raw milk or in certain items to reduce cost whenever the cost of raw milk becomes too high.
- Train dairy farmers in cost management, especially in relation to the year-round formulation of feed.

3.2.3 ARABIC SWEETS – PRIORITY SUB-SECTOR

Products Arabic sweets: baklava, maamoul, maamoul stuffed with dates, barazek, stuffed dates, kaak, kanafeh

Estimated number of companies 492 bakers – out of which around 149[92] are specialised in Arabic sweets

Average number of employees 2,550 employees in the specialised Arabic sweet sector

BACKGROUND INFORMATION

Arabic sweets are considered as part of the bakery sub-sector in Jordan, covering higher-quality products. Official information specific to Arabic sweets is difficult to extract from the sub-sector information.

Arabic sweets have been produced industrially in the region for over 150 years; they include typical Middle East products, especially such as originate in the Levant area and eastern Turkey. Despite many products' Turkish origins, the development and upgrade of Arabic sweets production is under way in several Middle Eastern and North African countries. Each country has its own methods of production, and products are highly personalised and dependent on the skills of the chef. Although quantities consumed are large, especially during feast times, production is still limited to the producers' shops or large kitchens. Premium products are often branded according to the family names of the owners/producers. Brands that have become famous have opened outlets that distribute sweets all over Jordan, and some have semi-industrial central kitchens for their production.

MAIN ACTORS

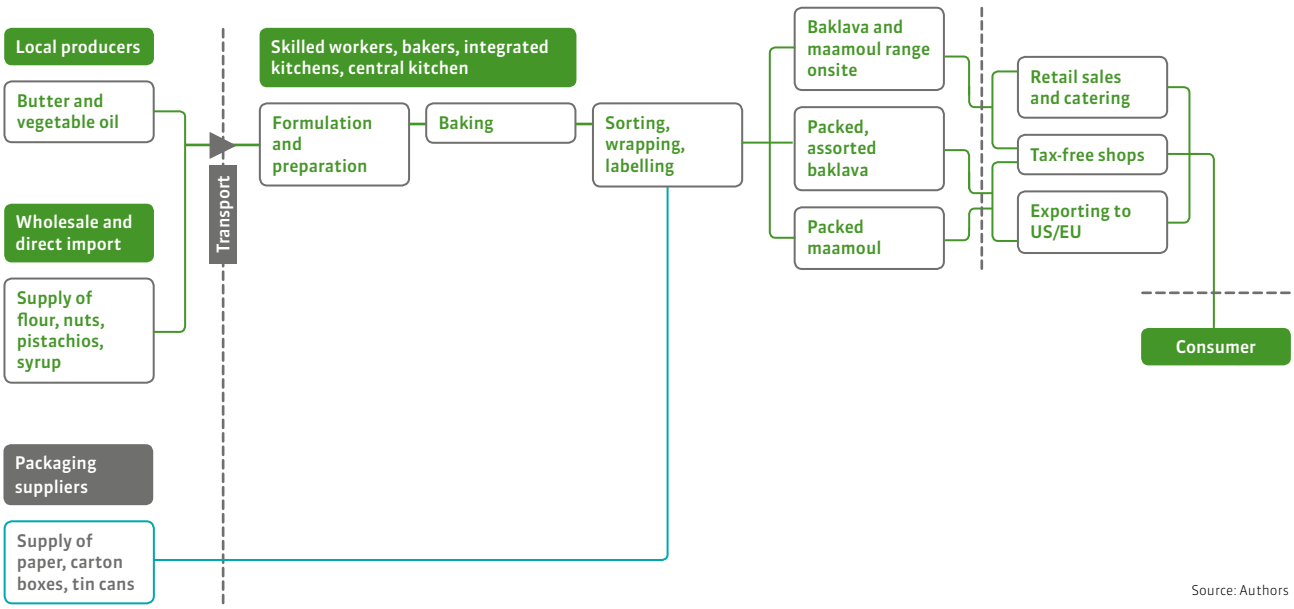
Upstream:

- Raw material suppliers: Most of the raw material needed for Arabic sweets is imported directly or procured through local wholesalers, except for some milk fat or clear butter, akkaoui cheeses for kanafeh, dates from local production and some sugar replacement molasses.
- Production kitchens: These may vary in size and capacity from small domestic kitchens with 2–5 workers and a manual method of production to large central kitchens, factory-like, with over 150 workers and some automation at the forming and packaging level.

Downstream:

- Producers' outlets distributed all over Jordan and within Queen Alia International Airport.
- Retail distributors.
- Social event organisers.
- International export agents for those companies that export to Iraq, Syria, Lebanon, and Palestine. Exports to the EU and the US is limited to vegetarian products.

Figure 27: **Arabic sweets value chain**



Source: Authors

92 Figures from the Amman Chamber of Industry 2018.





Supporters:

- Input suppliers: Raising prices according to international fluctuations.
- Packaging suppliers: Mainly local.
- Logistics service providers: Only for those producers that distribute outside their shops or cater to large events such as marriages.
- Accredited laboratories.

MSME PRODUCTION

Arabic sweets are produced according to an artisanal knowledge inherited from previous generations. Productivity is based on human skill and the training of workers. The importance of Arabic sweets lies in the fact that economies of scale do not affect the profitability of businesses as much as in other sub-sectors, because of the high manual input required and relatively high cost impact of raw materials in the premium products such as baklava stuffed with pistachios and almonds; burma and similar items. Hence, cheaper products, such as kaak and barazek, are usually more mechanised and are not very profitable for small entities.

The bakery sub-sector is one of the largest-growing within food processing, with a growth rate of about 22% from 2013 to 2016. Its turnover in 2017 was about USD 870 million[93].

Arabic sweets – or ME (Middle East) sweets, as they may also be called – are not developing at the same pace and are more and more being sold in specialised outlets.

Raw materials: Semolina, flour, sugar, corn syrup and rice are imported from countries such as the US, Canada, Turkey and the Netherlands. These products are subject to official specifications and regulations.

Pistachios, nuts, almonds and other types of nut are also imported, from countries such as Turkey, Iran, Spain and the US, and should be subject to scrutiny as they may be high in aflatoxins. To assure safe and good-quality products for export, large producers of Arabic sweets claim to prefer to import goods directly from the suppliers, since they have ambient and cold storage facilities, rather than through local importers and wholesalers. Smaller producers tend to rely on local suppliers.

Using expensive nuts and pistachios may be a cost driver in some products. Other products used for Arabic sweets are white cheeses, molasses and dates, which come from Jordanian sources.

Packing materials: Very important in Arabic sweets in terms of attracting consumers. All packaging materials are sourced locally, although basic materials may be imported. Primary packaging can constitute a significant part of the cost of a product, especially wooden packaging or fantasy tins. A cheaper alternative is flexible film. Secondary packaging may comprise corrugated cartons or plastic wraps.

Gross margins for the bakery sub-sector amount to about 32% based on ex-factory outputs for 2017[94]. The sub-sector is highly diversified and the margins for Arabic sweets can be assumed to be higher,

93 DoS 2016 and 2017.

94 Calculated from DoS 2016 and 2017 figures.

considering that the average export price per kg is USD 3.7 (free on board)[95].

Quality: All major producers have been certified and approved based on international standards. A minimum requirement for export is HACCP certification, with North American chains requiring FSSC 22000 and EU chains requiring BRC. It is clear that the smaller players are not certified as they have not attempted to export; but they are generally approved by the JFDA.

Although the products in question do not pose a great risk to consumers in terms of preservation, the raw materials (pistachios and nuts) could carry non-permitted toxins meaning they will be rejected by food safety authorities. Therefore, robust quality assurance systems are a must in such operations and should be addressed by producers through the thorough testing of the raw materials.

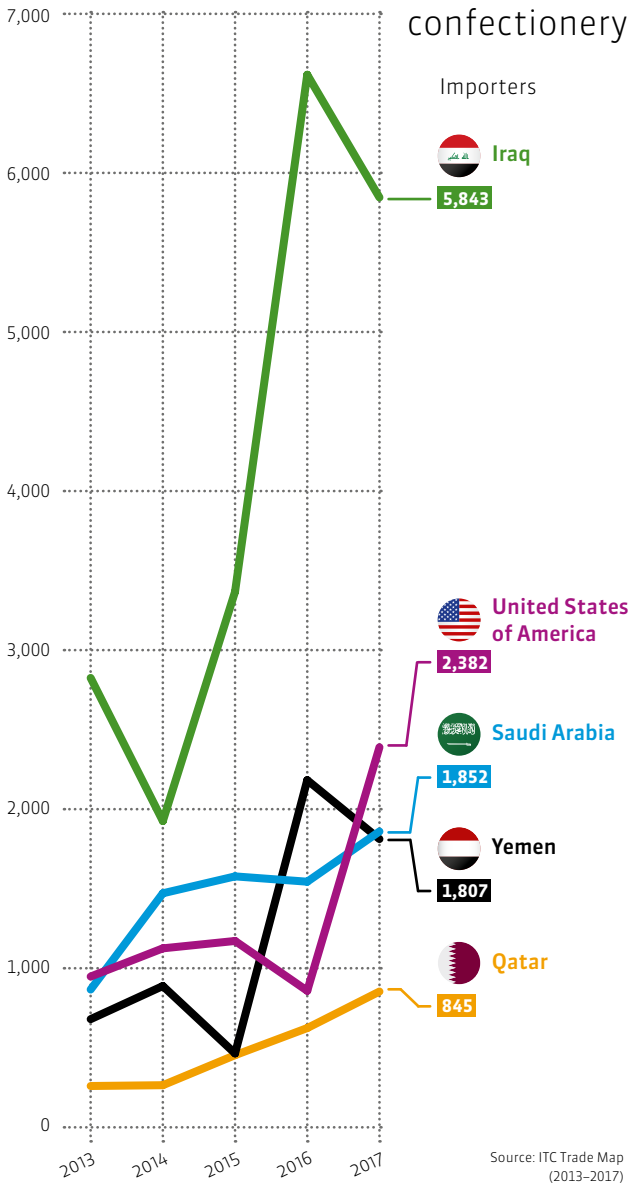
MARKET ACCESS

Local market: The main turnover in Arabic sweets comes from the domestic market. Most of the premium brands are very well distributed across the Kingdom through their respective outlets (including Zalatimo Mirabel, Anabtawi, Al Nafiss, Paradise and others), in addition to cheaper products being sold through bakeries. These cheaper items are also available in Jordan's principal supermarkets, with a shelf life of at least one year. The value of the domestic market is currently difficult to estimate as the key actors are not keen to share such information. Performing a survey on this subject at the consumer level would allow estimates to be made. We can gain an indicative idea about the size of the Arabic sweets market, as part of the bakery sub-sector, by noting that local consumption for the latter is in the vicinity of USD 1 billion[96].

As mentioned earlier, Arabic sweets are mainly directly distributed through specialised outlets. Big brands/names have a minimum of 10 outlets all over Jordan. Small brands have their own outlets in specific locations and some ordinary bakeries sell certain low-end products. Only pre-packed items packed in retail pouches or cartons, such as stuffed dates or others, are sold in major supermarkets.

Premium Arabic sweets are also sold in tax-free outlets at the Queen Alia International Airport.

Figure 28:
Trends for the five major importing markets for Jordanian confectionery (in USD thousand), 2013–2017



Export markets: Jordan exports Arabic sweets to around 50 countries worldwide. Producers address exports through three main channels:

1. Local agents at the country of destination.
2. E-commerce.
3. Airport tax-free area.

The export figures extracted from the ITC website are approximate due to the overlapping products under the relevant HS codes between Arabic sweets and

95 DoS statistics on imports and exports 2017.

96 Estimated from DoS local production and ITC imports and exports.



other bakery or biscuit items. According to the 2017 DoS and ITC statistics, the annual export values for Arabic sweets based on the corresponding HS codes[97] show a wide variation between USD 3.7 and 14 million.

The main export markets in descending order are: Iraq, the US, Yemen, KSA, Qatar, Palestine, UAE, Kuwait, the Russian Federation and Lebanon[98]. It is expected that export figures for Arabic sweets will continue increasing for 2018 onwards because of the effort being made by some producers to develop exports within the premium range of Arabic sweets as well as long-shelf-life products. This is shown by the fact that, out of a total of 10 Jordanian exhibitors, two major Arabic sweets producers were exhibiting at the international food fair SIAL in Paris in October 2018 (Zalatimo Mirabel and Anabtawi).

Figure 28 presents the five major export markets for Jordanian Arabic sweets, underlining a general positive trend in relation to the Iraqi market and regular positive growth between 2013 and 2017. The two markets that are on a continuous upward trend are KSA and Qatar.

Technical requirements for market access: The technical requirements for food safety are similar to those indicated in the processed F&V sub-sector. Products can easily achieve most countries' requirements, provided that the relevant labelling and packaging norms are respected.

Market barriers and major competitors: Middle Eastern sweets should encounter few market barriers if the minimum safety and hygiene measures are taken to prevent contamination. ME sweets are mainly destined for Arab populations living abroad, as mainstream consumers in Western countries are still not familiar enough with these types of product.

The main competitors on the export markets are Turkish products, which are usually cheaper, and products from Lebanon and Syria.

Potential markets and opportunities: Using the HS codes, the markets identified as having greatest potential for Jordan's exports of Arabic sweets are: Iraq, UAE, Bahrain, Kuwait, the US and the UK, as well as other countries with rich Arab-Islamic communities such as France, Sweden, Belgium, Germany and Australia. Most of these countries have trade agreements with Jordan and their tariff rates are low to nil. Arabic sweets have the potential to easily surpass current figures if the right marketing tools can be developed, for example e-commerce or collaboration with specialised local agents once products have entered mainstream markets.

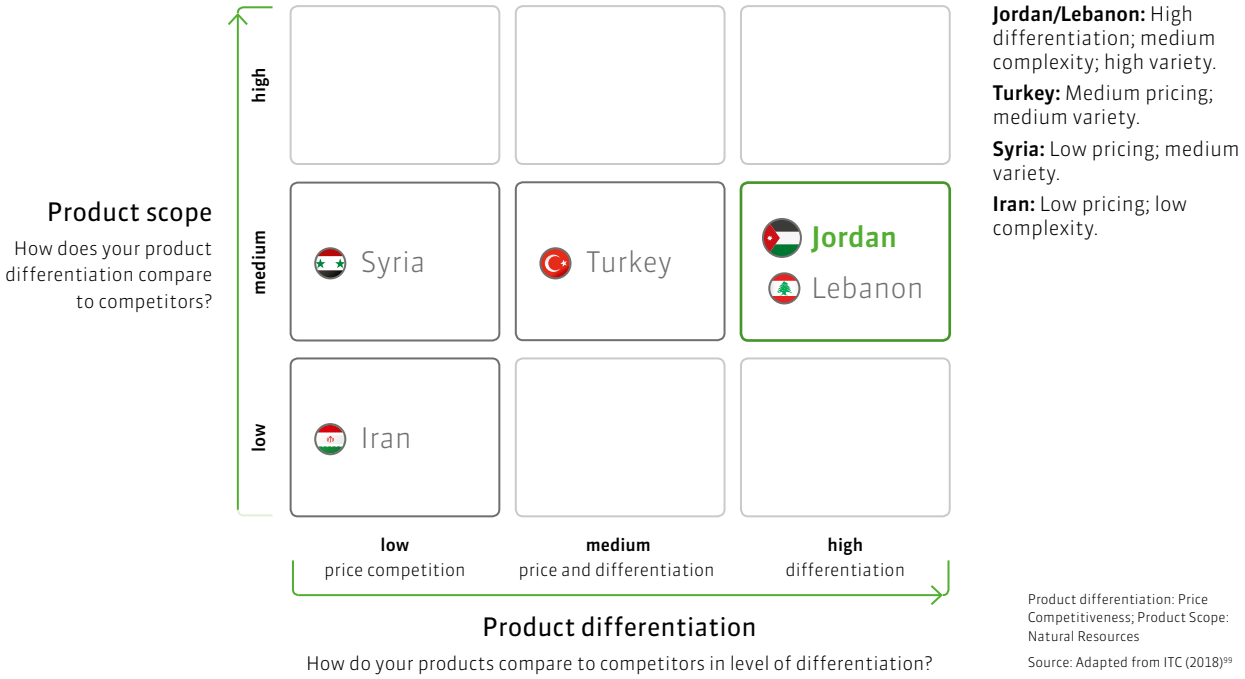
INNOVATION

In line with the international market trends presented in sub-section 3.1.5, many Arabic sweets producers are aiming to produce low-calorie or low-sugar versions, sold under the category of "light sweets". Extending products' shelf life through use of modified atmosphere packaging, facilitating long-distance transport, will also have an important impact on exports.

97 HS codes 170490 and 190590.

98 ITC Trade Map statistics 2017. See Annex 7.7.

Figure 29: **Product scope and differentiation for Arabic sweets**



Product differentiation: Price Competitiveness; Product Scope: Natural Resources

Source: Adapted from ITC (2018)[99]

Arabic sweets are significant for their wide distribution all over the country and their need for skilled labour, both male and female, recruited from outlet locations.

The biggest innovation driver, according to some producers, is working with international clients in order to gain market intelligence.

Performing modifications on products, using better packaging, reducing caloric intake and increasing product shelf life will require local collaboration with technical experts and possibly academia.

Furthermore, use of interactive websites to sell pre-packaged premium products seems a promising means of reaching export markets quickly, without heavy investment. Jordanian suppliers seem to be ready – in terms of product quality, packaging and shelf life – to exploit such a sales tool.

PRODUCT SCOPE AND DIFFERENTIATION

Product scope analysis helps determine the Arabic or ME sweets product position in terms of complexity, variety and value addition. Product differentiation based on price competitiveness can be used to compare the Jordanian products to those of regional competitors for Arabic sweets (see Annex 7.8).

Jordan has succeeded in developing a premium segment of Arabic sweets at the export level, which increases added value and compensates for the level of imported raw materials included in production; in the medium term, Jordanian products could be targeting European and US markets. Jordanian products are presently competing with Lebanese products, which have also developed a high-quality image and are found in similar markets. Syrian products are strong in the domestic market, in addition to Iraq being practically an extended market for Arabic sweets from Syria. In the long term, Syrian sweets could become a serious regional threat considering the complexity of these products.

Turkish products are well known and widely distributed. However, Turkey is particularly strong in a slightly different range of sweets, including for example loukoumi and different versions of baklava.

Iranian products are mainly sold in neighbouring countries and at present do not constitute a major competitor to Jordanian products. Like Turkish products, they also cater to different tastes.

99 Based on ITC Trade Map statistics 2017. See Annex 7.8.

MAJOR SUB-SECTOR CHALLENGES AND RECOMMENDATIONS

Challenges:

- Little information is available on the market size of Arab sweets in Jordan, at either domestic or export level, which makes it difficult to be accurate as to the potential of this sector.
- Most ingredients used for the manufacturing of Arabic sweets are imported. This will limit the flexibility of Jordanian producers at the cost level and consequently provides a tight margin for the manipulation of prices. These limitations could place Jordan at a disadvantage compared to countries like Turkey or Iran.
- Jordanian products should be able to reflect better taste, creativity and presentation, so that it can justify the higher cost of production.
- Assurances need to be provided that ingredients used are safe for both the local market and for export, especially in regard to levels of aflatoxins or ochratoxins, and to shelf life.

Recommendations:

- Supply of ingredients should be monitored for contaminants, particularly chemical contaminants. This is essential for market development.
- The technical and financial possibilities of growing some of the agricultural crops used in the Arab sweets sector, such as nuts, should be reviewed; this could reinforce the comparative and competitive advantage of such products.
- Product development support should be provided to producers both at the product level and at the packaging level, in order to meet market needs and requirements and enable the introduction of innovative products.



3.2.4 PROCESSED AND PRESERVED MEAT

Products Fresh, chilled, frozen beef, lamb and chicken, canned meats, mortadella, beef patties, sausage, smoked meats, Armenian sausages, other cold cuts.

Estimated number of companies 105 — 21 of which are of a large size and modern.

Average number of employees 214 per company

The meat industry in Jordan is one of the most successful in terms of being able to meet local demand. The role of large companies is dominant in this sub-sector, which explains why it has not been prioritised in this study. Infrastructure, quality and product development requirements are rather sophisticated for such businesses. Yet, the growth rate of the sub-sector did not exceed 0.6% between 2013 and 2016. There are small players, but not on the mainstream market. MSMEs are apparent as farm suppliers, especially for poultry.

In terms of livestock, Jordan imports more than 90% of its beef and 30% of its poultry. Jordan is only self-sufficient in sheep meat, according to the United States Department of Agriculture exports 2015. The industrial meat sub-sector is transformational and includes several large companies such as Al Nabil, Merjan and others, which mainly work on the production of ready-to-use or ready-to-eat food, either frozen or canned (luncheon meat and mortadella).

Locally produced products have an advantage over imported products in that consumers need to feel assured of the halal nature of the meat products.

PRODUCTION

Raw materials: Most of the raw material used for beef production is imported, estimated at USD 70 million[100]. This sum covers only the raw material especially imported for factories. It does not include meat imported as live animals or chilled meat for retail and Horeca[101]. Poultry on the other hand is locally produced and raised.

Packing materials: Food-grade, flexible plastic films are imported as sheets, which are formed and printed locally. Tins are produced locally.

Process: The meat processing industry in Jordan uses combined manual and mechanised procedures. The manual aspect is present at the trimming and cleaning stages, whether for beef or poultry. The level of mechanisation depends on production volume. Smoking does not allow much mechanisation but requires skilled labour.

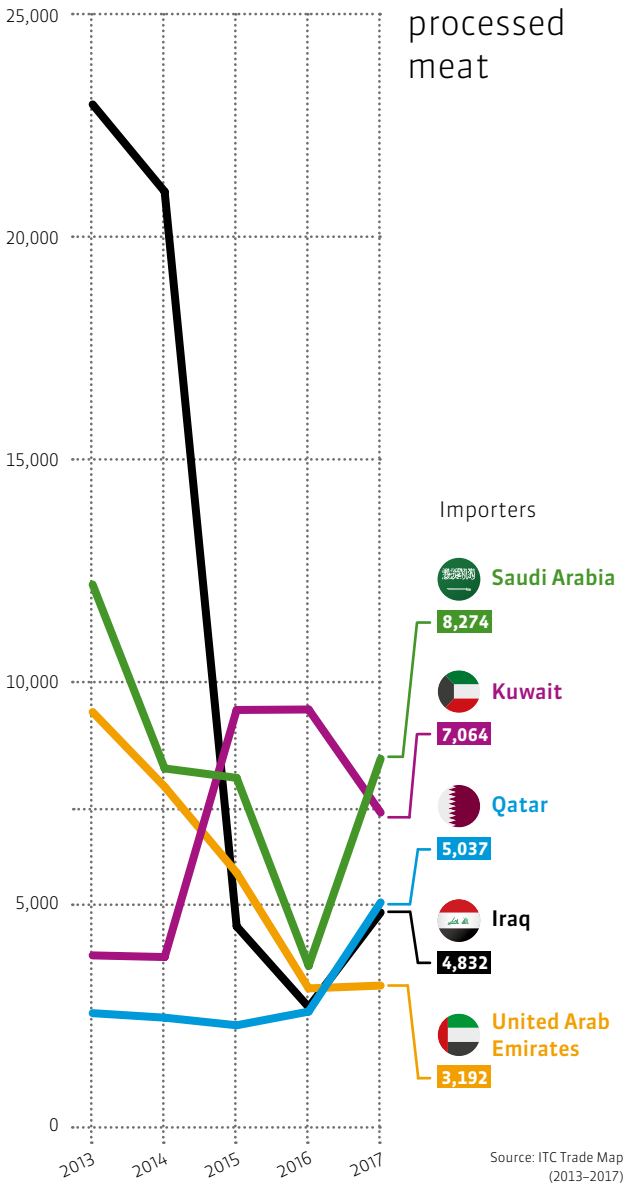
Employment: Given the large number of employees in the major companies, the meat industry is labour-intensive. Men still comprise more than 70% of the workforce, but women are slowly but surely acquiring an increased role, especially in morning shifts and quality control.

Gross margins: The meat sub-sector in general has an average gross margin of about 28% based on ex-factory outputs. The low margins are mainly linked to the importing of raw material and the level of manual

100 DoS 2017.

101 Horeca is an acronym that refers to the food service industry. The term is an abbreviation for Hotel, Restaurant, Café. Eurostat: Abbreviations and acronyms. https://ec.europa.eu/eurostat/ramon/cybernews/abbreviations.htm#H.

Figure 30: **Trends for the five major importing markets for Jordanian processed meat (in USD thousand), 2013–2017**



labour involved, but also to the cost of energy for refrigeration and cooling of working areas.

Quality: All large factories have ISO 22000 food safety certification, whether they export or not. Their quality control staff are skilled and educated.

MARKET ACCESS

Local market: Some 90% of processed meat products are sold domestically. Large factories have their own refrigerated vehicles, which distribute all over Jordan to all types of retail outlet and Horeca.

Major-selling products are canned meat, luncheon meat and mortadella, frozen beef and chicken, smoked meat and shoulder ham. All meat products are halal, except of course for pork-based meats which are sold separately in some supermarkets. Local market sales from local industries alone are estimated to be around USD 930 million[102].

Export market: The main export products are ready-to-eat preparations such as kubbeh, burgers and chicken products (fresh and frozen chicken, whole and cuts). Exports as given by the DoS 2017 statistics are around USD 40 million.

- Halal certification favours Jordanian products wherever there is competition with processed meat from Western countries and India in the markets mentioned.
- The main export markets are KSA, Kuwait, Qatar, Iraq and UAE, followed by Oman, Syria, Lebanon, Yemen and Bahrain.

As shown in Figure 30, the meat industry is facing a downward trend in exports. The main decrease comes from the Iraqi market, where meat exports fell from USD 23 million in 2013 to USD 5 million in 2017, mostly due to cheaper products emerging from KSA and Iraq's decision to develop its own industry.

Market potential: Considering the advanced technology of the meat sector in Jordan and the diversity of its products, export potential might be greatly increased with a focus on specific items not produced by competitors, such as smoked meat and frozen kebbe, and other Mediterranean delicacies. The markets of Iraq, Lebanon, UAE, Qatar and Bahrain remain very promising.

The export potential to Western countries might only become significant if Jordan gains approval to export animal-based products to the EU or the US. This is one

102 Jordan Chamber of Industry (2018): Processed Food, Agriculture and Animal Husbandry Sector Study, July 2018.

of the recent recommendations of the JCI. Though this is an understandable initiative, the matter is not easy to resolve. Serious efforts will need to be made, and measures introduced, by the Jordanian food safety authorities to convince developed markets that the Jordanian MoA has developed a full monitoring system for animal health in the Kingdom.

Barriers for export and major competitors:

- Compliance with technical requirements and trade barriers.
- Saudi FDA registrations place constraints on imports, given the significance of KSA's own meat industry.
- Competing countries are KSA, Egypt and Turkey.

Technical requirements for market access: Processed meat products are highly regulated in most countries. In order for its products to be allowed to enter the EU and the US, Jordan must be listed as an approved meat exporter by these countries, which it still is not. The EU requires that the competent authority in Jordan, the MoA, submit a written request to the Directorate General for Health and Food Safety of the European Commission to export meat or meat products to the EU. The request should contain confirmation that the authority can fulfil all relevant legal provisions to satisfy EU requirements. When the country is listed as approved, particular companies complying with the food safety requirements set by the EU for meat products will also be listed. The US has an equivalent determination process under the auspices of the US Department of Agriculture Food Safety and Inspection Service (FSIS).

As far as GCC countries are concerned, and more specifically KSA, an exporting country is required to provide a health attestation showing that:

- Meat is fit for human consumption.
- Animals have been slaughtered in a slaughterhouse approved by the competent authorities of the origin country.
- Meat has been subjected to inspection by competent veterinarians assigned by the competent authorities of the exporting countries.
- Meat and meat products have been handled in facilities that have been inspected by competent authorities and implementing an HACCP-based food safety management system.
- Meat products do not originate from animals that have been slaughtered for the purpose of disease eradication or disease control.
- Meat products have not been derived from animals fed on processed animal protein, excluding milk substitute during lactation or fishmeal.
- Meat products have obtained halal certification from the Muslim agencies (societies and Islamic councils) in the exporting country, as approved by the GCC, which supervise the slaughter process and provide documentation according to GCC requirements.

INNOVATION

Some companies in the meat industry have been able to innovate in frozen RTE products and packaging enabling them to access regional markets. Some companies have shifted from the tin can to flexible packaging (e.g. mortadella), reducing the cost of packaging and shipping. This has rendered such products more competitive in export markets. Meat companies have their own R&D departments but should also lobby with the MoA and JSMO (JFDA) to speed up the approval process for exports to developed markets such as the EU and the US.





3.2.5 VEGETABLE OILS

Products	Animal fat and oil, soya oil, olive oil, sesame oil, black seed paste, corn oil, palm oil, sunflower oil, coconut oil, vegetable oil, margarine		
Estimated number of companies	117 16 olive oil companies in Amman	**Average number of employees**	68 per company

Vegetable oil production in Jordan is sub-divided into the refined vegetable oil and olive oil industries:

Refining of crude extracted oils from legumes:

- Refined soya oil, sunflower oil, corn oil and canola oil.
- Soy lecithin.
- Vegetable ghee.

Olive oil production comprises the extra-virgin, virgin, pure and pomace olive oil.

Average gross margins: Around 30% based on gross output ex-factory (for the whole sub-sector).

Raw material: All refined vegetable oils apart from olive oil (sunflower, soya, safflower, corn) depend for their production on imported raw agricultural commodities. An important cost driver is whether this raw material is crude oil or raw sesame.

The growth in this sub-sector has not been significant during the past five years, which is related to the fact that Jordan is massively importing refined legume oils from cheaper sources, and the fact that olive oil production has been fluctuating for the past five years.

In 2017, Jordan imported over USD 126 million of crude oil from safflower and soya for industrial conversion alone, as well as about USD 27 million of crude palm oil for the production of vegetable fat and USD 16 million of ready-to-pack refined vegetable oils for direct consumption[103]. Jordan exports about USD 2.2 million of refined vegetable oils, making the estimated local market consumption about USD 166 million.

Production: Oil refining factories are highly automated and have mechanised lines. Production capacity exceeds 50 tonnes per shift, or about 116,000 tonnes annually.

Quality: Companies refining vegetable oils are all have ISO 9000 and HACCP certification as they sometimes operate under international brands. Sesame processing companies comply with JFDA requirements.

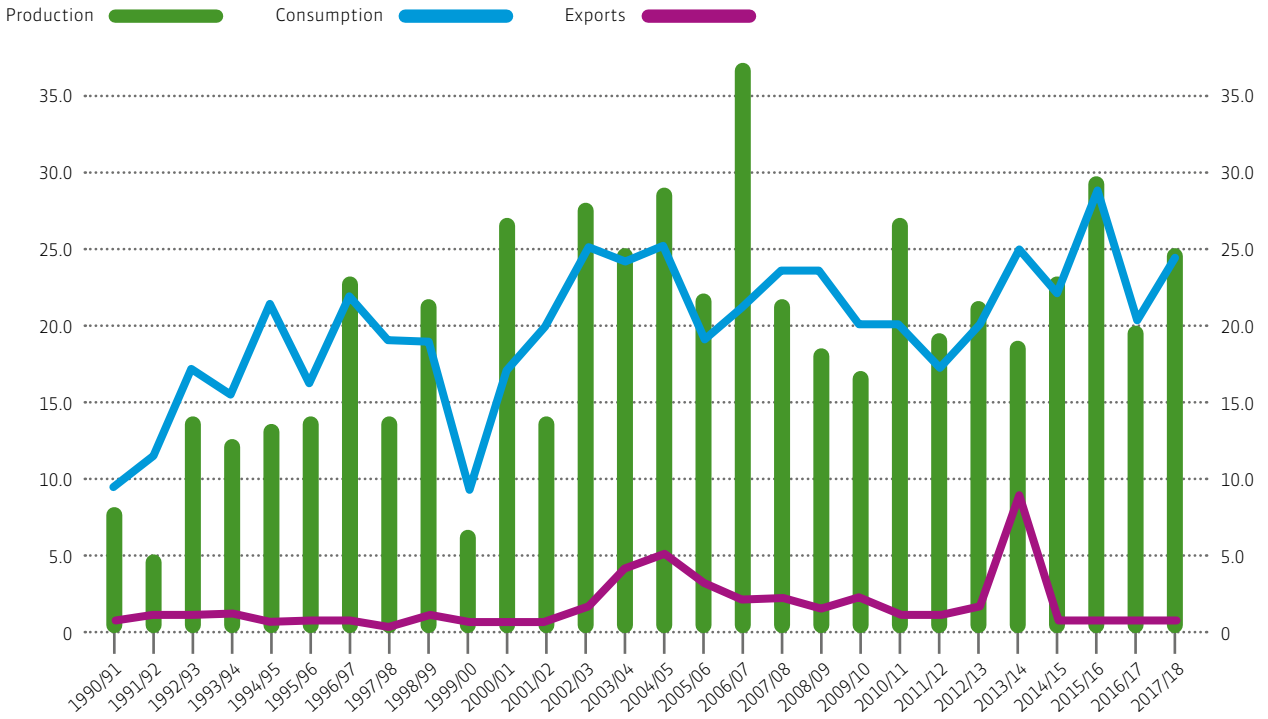
Olive production is highly significant in Jordan due to the large volume of investment it attracts. Jordan is one of the oldest olive habitats in the world and the olive tree is considered to be an important part of Jordanian heritage. Olive growing is spread over two regions of the country, in the west and north-east. As of the year 2000, Jordan achieved self-sufficiency in the production of both olive oil and table olives[104].

According to DoS statistics, the olive growing area (12 million trees) covers 24% of Jordan's total arable surface area, accounting for 74% of the surface planted with fruit trees.

103 DoS import and export figures 2017.

104 International Olive Council (2018): Olive Growing in Jordan. http://www.oliofficina.net/knowledge/economy/olive-growing-in-jordan.htm.

Figure 31: **Trends of olive oil in Jordan (in thousand metric tons) between 1990–2017**



Source: International Olive Council (2018)[105]

Following the classification adopted by this study, olive production should be divided between the F&V sub-sector and the vegetable oils sub-sector; however, we have preferred to combine processed olives and olive oil, since they interlink and are both successful products within the Jordanian processed food industry, both in production and marketing.

The average annual olive production over the last five years was 151,000 tonnes, while olive oil production (Figure 31) was approximately 23,000 tonnes. The average annual production of table olives was 27,000 tonnes.

Employment related to olive oil is high, especially when harvesting is included as part of the sector requirements. Most pickers are female and work on a seasonal basis. Jordan has 134 oil mills, most of which use advanced technologies. Olives are harvested manually to guarantee a high-quality product and the use of chemicals is kept to a minimum. There is a great interest in organic farming and the number of organic olive estates is growing[106].

Quality: All olive oil companies comply with JFDA requirements.

MARKET ACCESS AND CHANNELS

Most refined vegetable (legume) oils and vegetable ghee are sold on the domestic market, with about 2,800 tonnes exported to KSA and some European countries.

Locally, oils are sold under various brands and in various sizes in all types of retail outlets. They are also provided as frying oils for catering in Horeca. Total market size may be estimated at around 100,000 tonnes.

Most virgin and extra-virgin olive oil produced is consumed nationally, average annual consumption standing at 2.5 kg/person. Remaining production is mainly exported to Pakistan, Kazakhstan, KSA, UAE, Kuwait and Qatar, among others.

In 2017 olive oil exports amounted to about 230 megatons with a value of USD 1 million[107].

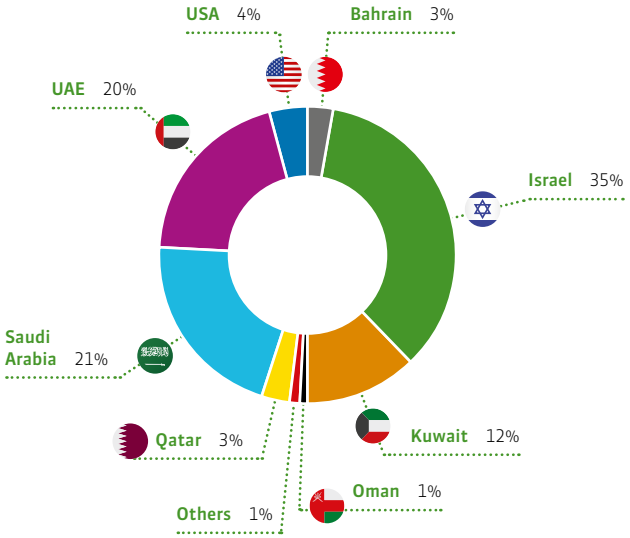
The good news is that Jordanian exports of **table olives** in the 2016/17 crop year increased by 43% compared to the previous crop year, rising from 7,000 tonnes to almost 10,000 tonnes. As indicated in Figure 32, the main export destinations are Israel, accounting for 35% of total exports, followed by KSA at 21%, UAE at 20%, Kuwait at 12% and the US at 4%.

105 International Olive Council (2018): Olive Growing in Jordan. http://www.oliooffcina.net/knowledge/economy/olive-growing-in-jordan.htm.

106 Ibid.

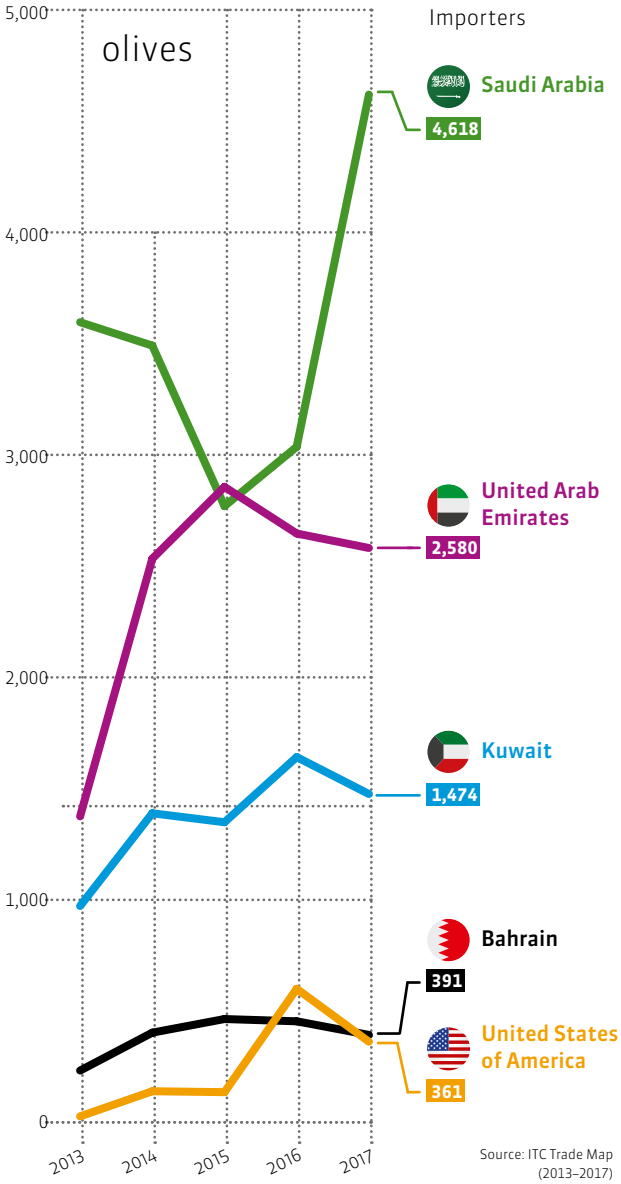
107 DoS statistics on exports 2017.

Figure 32: **Percentage of total exports of table olives in Jordan in 2016–2017**



Source: International Olive Council (2018)[108]

Figure 33: **Trends for the five major importing markets for Jordanian olives (in USD thousand), 2013–2017**



Source: ITC Trade Map (2013–2017)

Figure 33 shows the trends of canned olives within the five major markets. KSA and UAE are the leading markets while the US appears an interesting potential market to be further explored.

Market barriers and competitors

Jordanian olive oil is of a high quality but cannot always compete with the international prices of Turkish products; Turkey is the main competitor. Spain, Italy and lately Egypt are also among the main actors on the international market. Mixing virgin olive oil with industrially refined olive oil is not allowed in Jordan, although it is common practice in many olive-oil-producing countries. However, this does not affect the local market, as Jordan imports practically no olive oil. Nevertheless, the wide availability of virgin olive oil in Jordan could constitute a good opportunity to improve the price competitiveness of Jordanian products in export markets.

INNOVATION AND MARKET OPPORTUNITIES

Most products in this sub-sector are either commodity-like or strongly linked to commodity raw materials. Innovation is not an easy task, and is usually limited to packaging and labelling as well as developing a high-added-value concept. Creativity in packaging design can impact added value, especially for olive oil. Jordanian olives are of a good quality and could benefit from better marketing strategies.

Innovation in olive oil could be facilitated if Jordanian law were to allow mixing crude oils with other, softer types of healthy oils, such as sunflower or colza. Also, the infusion of oils with natural herbs or herbal flavours could provide local (food service) as well as export potential.

108 International Olive Council (2018): Olive Growing in Jordan. http://www.olioofficina.net/knowledge/economy/olive-growing-in-jordan.htm.

3.2.6 MANUFACTURE OF GRAIN MILL PRODUCTS

Products Wheat flour, cornflour, bran, ground lentils, semolina

Estimated number of companies 17	**Average number of employees** 90 per company

The mainly commodity-based grain mill sub-sector has been growing fast in recent years – 24% between 2013 and 2016. Currently, MSMEs can be found mainly in wheat flour storage, but small companies may also play an important role in the milling of legumes such as lentils, chickpeas and peas. Products are considered to be raw materials for other production, and their added value is not as final products for consumption.

PRODUCTION

All cereals are cleaned, husked and milled, with 75% or so being turned into white flour. Jordan imports 125,000 megatons of wheat and 135,000 megatons of maize for flour, giving a rough estimate of flour production from wheat and corn of around 195,000 megatons. Despite this, Jordan imports about 2,500 megatons of wheat flour and 350 megatons of cornflour.

Other products like lentils, freekeh and sugar are also sold as consumer items.

MARKET ACCESS

Some 95% of flour is consumed locally and about 10,000 tonnes of wheat flour are exported to countries like Iraq and Syria.

The role of MSMEs is basically as small mills, which have become uncompetitive due to economies of scale. They are only active within their own localities on a small scale and are mainly focused on the bakery sub-sector.

EMPLOYMENT

Mills employ mainly men, considering that the work is relatively harsh and dusty. In some MSMEs, like Kabatilo, women have the opportunity to work on various jobs such as mixing, filling and packaging.

Quality: All mills have food safety certification in compliance with the stringent requirements of their industrial clients. Even though flours are not highly perishable products, they tend to be quickly contaminated if badly stored or handled, or if the initial raw material contains aflatoxins or ochratoxins.



INNOVATION OPPORTUNITIES

There is an innovation opportunity in the development of consumer products that provide added value by speeding up the cooking process or by pre-including spices for taste enhancement.

Furthermore, flours today can be given different characteristics if treated or modified for use in different applications, whether pastry, pizza or other end-products. This potential might also be further explored.

The modern Al Ghazal flour mill, for example, has been able to develop a range of speciality flours to add value; namely flours 45 and 72, high-protein flours and high-fibre flours.

In line with the requirement for product diversification to promote market access, the Kabatilo SME mills in Amman have been able to develop a range of dry products based on milled grains which can be used as cooked food, for example lentil soup, freekeh[109], bulgur[110] and maftoul[111].

109 Freekeh is a cereal food made from unripened wheat that has been roasted and crushed into small pieces.

110 Bulgur is a cereal food made from the groats of several different wheat species, most often from "durum" wheat.

111 Maftoul is made from sun-dried bulgur wheat. Its grains are larger than couscous and slightly uneven, because they are rolled by hand.

3.2.7 MANUFACTURE OF COCOA, CHOCOLATE AND SUGAR CONFECTIONERY

Products Cocoa extract, chocolates, sugar candies, chewing gum

Estimated number of companies	225 139 of which are chocolate producers	**Average number of employees**	32 per company

The sub-sector is highly diversified and can be divided into:

1. Chocolate-producing companies that produce:
   - Bars with different flavours and sizes.
   - Pralines with different flavours.
   - Wafers with chocolate.
   - Real chocolate.
   - Compound chocolate with different flavours.
   - Chocolate chip, industrial chocolate and cooking chocolate.
2. Companies that produce hard and soft candies.
3. Companies producing chewing gums.

For the sake of practicality, we will restrict the scope of this study to encompass only the chocolate industry, since it is the biggest in terms of turnover and number of MSMEs.

PRODUCTION

Raw materials: All commodities are imported (cocoa powder, cocoa butter, sugar, lecithin, other).

According to the Jordan Chamber of Commerce, the turnover of chocolate factories was in the vicinity of USD 107 million in 2016. Chocolate produced by 139 small companies in Jordan covers only part of the market; the rest is imported. The value of imports is estimated to be USD 75 million, leaving a total market size of about USD 151 million, while noting that some imports enter into local production. As mentioned earlier, there are several variants of chocolate production, potentially requiring different kinds of equipment. Chocolate producers use traditional methods, with automation at the level of packaging whenever possible.

Employment: Chocolate production may be labour-intensive, especially for pralines and tablets. Those working in the industry should be skilled and trained not only in working procedures, but in hygiene requirements.

Quality: Most companies comply with JFDA requirements but are not prepared for mainstream export markets.

Gross margins: Whole sector margins are in the vicinity of 40% based on gross outputs ex-factory.

MARKET ACCESS

Some 70% of chocolate production is sold locally and about 30% is exported to the Gulf countries, the West Bank, the US, Canada and some European countries, among others. Considering that the Jordanian market is open to all international brands (Cadbury, Lindt, Mars and others), not to mention the very high listing fees applied by hypermarkets on chocolate products, it is difficult for local producers to compete without strong marketing support.

Market barriers and major competitors

The sub-sector's regression in recent years (-2.6% growth between 2013 and 2016)[112] is mainly due to policies adopted by neighbouring countries, such as Iraq, and the closing of borders for security reasons. The high cost of production compared to competitors can be explained by the lack of economies of scale. Furthermore, some countries like Turkey subsidise their exports and even transport, while most Jordanian MSMEs do not even have a marketing budget.

There is a need to establish the brand "Made in Jordan" as a Quality Seal to create awareness in export destinations.

Major competitors: Turkey for bars and wafers; Lebanon for pralines; UAE and KSA for wafers; in addition to international brands like Nestlé, Galaxy, Cadbury and Lindt.

INNOVATION OPPORTUNITIES

Innovating means creating a demand for products that have high value added and exploiting niche markets such as chocolate with added vitamins and minerals, chocolate for diets, chocolate for diabetics, and chocolate with added Jordanian flavours such as halawa or thyme.

112 Amman Chamber of Industry figures 2017.

3.2.8 PROCESSING AND PRESERVING OF FISH, CRUSTACEANS AND MOLLUSCS

Products Canned fish

Estimated number of companies	Average number of employees
4	175 per company

This sub-sector is highly dependent on imports and focused on canned fish or similar products. At present, it does not seem to be very viable in Jordan and information is scarce.

The sub-sector is not relevant to the present analysis, since it is composed mainly of large companies.

3.2.9 PROCESSING AND PRESERVING OF PASTA AND MACARONI

Products Macaroni, couscous, fine pasta

Estimated number of companies	Average number of employees
12	100 per company

The analysis of this sub-sector will focus on pasta and macaroni production. Pasta products of all types depend on the importing of semolina; other ingredients such as eggs may be purchased locally. Production is energy-intensive due to the role of the drying oven.

Pasta is a highly competitive industry where the big players are all multinationals. It requires economy of scale.

The dominance of highly automated production leaves no room for manual skills. The success in the industry depends on the development of a multi-business system which focuses not on the pasta alone but also on the raw material, as well as the development of other products that use the same set of raw materials or equipment.

MSMEs may only play a role in the industry in relation to customised products, with a reliance on cheap energy.

3.2.10 OTHER FOOD PRODUCTS

Products Roasted and ground coffee, ground herbs and spices, ground oregano, table salt, tea and tea herbs, children's food, soups, soya and milk juices, vinegar, condiments, sesame, yeast, baking powder, vanilla powder, fruit juice, powdered drinks, flavours, sesame husks, fruit concentrate, citrus fruit concentrate, bread additives, corn flakes, canned grains/cereals, starch, sesame paste, halawa, custard, sugar

Estimated number of companies	Average number of employees
467	52 per company

The major relevant products in this sub-sector are spices and herbs, canned grains, corn flakes, tahini and halawa. In view of the large number of products, the sub-sector includes 80% MSMEs.

Dominating the market, however, are medium and large entities such as Al Kasih, Blue Mill and others. Except for the canning of grains and similar products, which requires an important industrial infrastructure, the role of MSMEs in the development of the sub-sector seems to be primordial. Considering that it is difficult to achieve economies of scale in such a sub-sector, a large investment requiring a significant payback period is, therefore, not recommended.

Most of the products within this sub-sector depend on imported commodities such as raw materials and packing materials, but their added value is within the industrial average. The value of production is in the vicinity of USD 1 billion. Tahini, spices, canned food and fruit beverages constitute the bulk of this. The sub-sector's importance lies in its export potential and ability to add value to local agricultural products such as tomatoes and other fruits and vegetables (sauces, condiments), as well as development of RTE products (hummus, eggplant dip, cooked beans, etc.).

According to the Amman Chamber of Commerce, about 52 companies employing around 1,652 persons (average of 31 workers per unit, placing most such companies in the MSME category) are engaged in herbs and spices production alone. Jordan is famous all over the world for its herbs and zaatar mixes, with famous brands including Kabatilo and Al Attar.

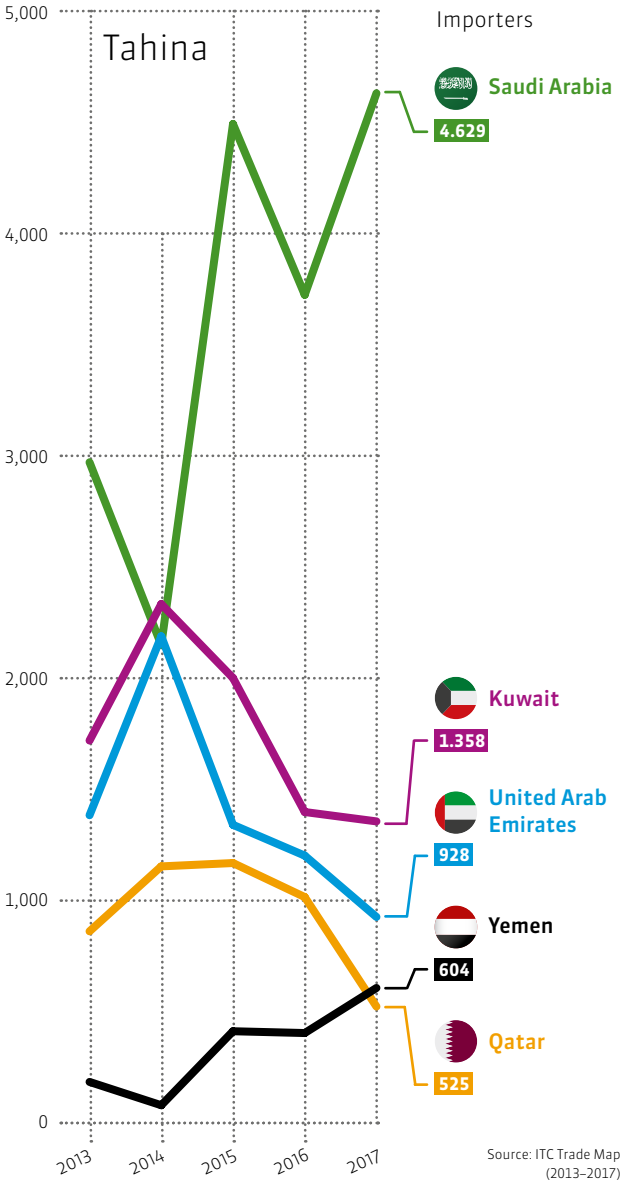
PRODUCTION

Raw materials: Most raw materials are imported commodities such as spices (USD 22 million annually[113]), chickpeas, beans or raw sesame; however, herbs are produced locally.

Packing materials: Glass, tin, flexible plastic films, plastic jars, carton boxes. All available through

113 DoS statistics on imports 2017.

Figure 34: **Trends of the five major importing markets for Jordanian tahini (in USD thousand), 2013–2017**



Jordanian importers, except for tin, which is produced locally.

Employment: The majority of employed personnel are men, but companies are encouraging women to work, especially in filling and packing.

Quality: Companies comply with JFDA requirements; few have invested in international certifications.

MARKET ACCESS

The local market constitutes about 65% of sales. Products from large producers and retail items are distributed all over Jordan in minivans, and directly from the outlets when buying loose.

In 2017, exports of herbal products reached a value of USD 5 million, with KSA the biggest importer (50% of all exports) followed by UAE, Kuwait, Qatar and Australia. The herbs market had grown by 35% since 2013.

Canned **legumes** such as canned chickpea paste had a value of USD 3.5 million in 2017. This represented a decrease from USD 7 million in 2013 due to consumers in importing markets replacing canned hummus with chilled fresh hummus produced locally. Additionally, competition from Lebanon and Syria has become stronger.

KSA is again a leading market, followed by the US, UAE and Palestine.

Finally, Jordan exports about 3,000 metric tons of tahini annually, with a value of USD 8 million; this value has been stable for the last five years with a slight increase since 2013. The main market is KSA, which imports 50% of the overall Jordanian exports, followed by Kuwait, UAE, Yemen, Qatar and Bahrain.

Market potential: The US and Canada are high-potential markets as long as goods comply with safety requirements for canned food and labelling is compliant.

Market barriers and competitors: Spices worldwide face significant competition; success is related to particular mixes and hygiene conditions. Jordan faces lots of competition in the spice industry from regional players such as Turkey, Lebanon and Syria. As far as herbs are concerned, Syria seems to be a major competitor.

INNOVATION OPPORTUNITIES

Jordan has a very good reputation when it comes to its herbal products and this should be highlighted in the context of collective marketing activities to bring out Jordan's quality and taste label. For products being directed to international markets, claims should be printed on packaging in the language of the respective destination country. Furthermore, labels should be designed and printed in a manner that reflects quality.



3.2.11 PREPARED ANIMAL FEEDS

Products	Ground barley, animal feed, chicken feed, mixed feed, animal feed concentrates, salt licks, fish feed, dog/cat food, premix – animal feed additives
Estimated number of companies	76
Average number of employees	69 per company

The main role of this sub-sector is in relation to the animal-based food sector, especially poultry, sheep and cow farms. Some animal feed companies also produce pellets for fish ponds. The sub-sector witnessed 40% growth between 2013 and 2016, which is impressive when compared to the other agro-food sectors.

The process of animal feed preparation is based on identifying the right nutritive recipe(s) at an acceptable cost. All raw materials are imported with certain specifications. Recipes may be simple, based on local fodder and green leaves, barley or corn, but can also be very technical and sophisticated with the addition of concentrates and nutrients.

In general, large poultry producers prepare their own feed recipes in order to control health and cost. However, all small farmers and herd owners rely on formulations recommended by the suppliers.

PRODUCTION

Total feed produced in 2016 amounted to USD 230 million with an export value of USD 35 million.

Gross margins: Exceeding 60% based on gross output ex-factory.

Market: About 87% of products, namely poultry, sheep and cow livestock, are destined for the domestic market.

Feed recipes or feed concentrates may be produced on a small scale. Large companies in Jordan, especially those owning poultry farms or large dairy farms, have developed their own feed production systems (for example, Hammoudeh – Jordan Feed Company). However, this might also be achieved by small or even microcompanies, with similar results.

The high gross margin in the feed business, based on the 2016–17 figures, indicates an opening for local as well as international competition.



4

CHALLENGES AND OPPORTUNITIES



The following SWOT analysis focuses on strengths, weaknesses, opportunities and threats for the food processing sector.

Figure 35: **SWOT analysis**[114]

STRENGTHS

- Long-standing tradition in trade and food processing.
- Young, educated population.
- Geographically advantageous, located between big markets (Iraq, Syria, Egypt, KSA)
- Positive trend in legal frameworks, inspection regime, support from state institutions.
- Climate allows cultivation of agricultural products all year round.
- Large number of free trade agreements (FTAs) signed by Jordan increases trade opportunities with the respective countries and in general.
- Availability of specialised industrial zones all over Jordan facilitates industry start-ups and allows cost sharing in various utility services such as electricity and waste water treatment.

OPPORTUNITIES

- Evolving market demand and increased loyalty of the Jordanian consumer to locally produced products.
- Market penetration through product diversification and higher quality, especially in Arabic sweets and the F&V sub-sector. This applies to markets such as the EU, the US, Australia and Japan.
- Strong potential for agricultural growth and room for some import replacement especially in the F&V sub-sector.
- Increasing added value through the enhancement of end-product complexity.
- Increased local production and replacement of imports, especially by those products with added value, such as RTE products based on meat and vegetables.
- International market trends (organic and ethnic food, health trends, nutrition trends, clean labelling).
- Niche market potential in growing organic vegetables, also as a basis for organic processed foods.
- Jordanian Arabic sweets may be able to exploit US markets since Turkish sweets pay 300% customs duties in the US and are the main competitors for Jordanian products.
- Availability of new food technologies.
- High potential for solar-based energy solutions to reduce energy bills, which are relatively high, within the cost structure of processed food products.
- Positive aspects of micro and informal businesses might create a more stable economic cycle within the food sector.
- Jordan's large number of FTAs can open market windows, especially in the African continent.

WEAKNESSES

- Reliance on traditional methods in agriculture, which retards the inclusion of new, more efficient technology.
- The level of education of small farmers does not allow integration of Global GAP or Integrated crop management (ICM) on their farms.
- The delay in application of good practices will impact the penetration into developed markets of agricultural products in their original and transformed versions.
- Absence of a skilled, educated specialised labour force, which delays the application of food safety systems at the production floor level.
- Focus on traditional technology and processes; absence of innovative culture.
- Poor dissemination of GMP among blue-collar workers as a result of labour rotation, which affects quality and the maintenance of audited certifications; also caused by a strong reliance on foreign labour.
- Unused capacities of certain production facilities reflected in higher costs.
- Low investment in human capital in terms of training and coaching.
- Absence of reliable statistical data within sub-sectors.
- Loss of market share in neighbouring countries as a result of economic crisis as well as rise in competing products.
- Imports competing with local production, especially in the dairy sub-sector.
- Risk of food safety problems (food-borne diseases).
- Decreasing reputation of Jordan as a food producing country.
- Decline in the ability of Jordanian companies to invest in growth, due to lack of financial loan facilities.
- Inability of small and micro business to grow, polarising the development of the food sector and creating deficits in poverty reduction and employment generation.
- Future clean water availability for agriculture and industry.
- Impact of the cost of energy on product cost structures might completely kill certain categories of food products with low margins of profit.
- Regional political situation affecting trade logistics and investment climate.

THREATS

- Loss of market share in neighbouring countries as a result of economic crisis as well as rise in competing products.
- Imports competing with local production, especially in the dairy sub-sector.
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- Future clean water availability for agriculture and industry.
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- Regional political situation affecting trade logistics and investment climate.

114 Based on qualitative interviews and validation workshops.

IDENTIFIED KEY CHALLENGES FOR MSMEs

Based on the SWOT analysis, four key factors affecting MSMEs' performance and competitiveness can be identified.



1) NATIONAL POLICIES

National policies for food processing MSMEs are weak. There is an absence of policy for promoting contract farming to guarantee supply for processors, poor country branding as a food producer and no mechanisms for providing farmers with market information.

- Raw F&V varieties used in industry usually differ from those sold as fresh; while farmers prefer to produce fresh market varieties, companies need to pre-contract their requirements if they are to assure availability and sufficient quantity of the varieties they need. Most farms are not managed as businesses and are usually reluctant to enter into long-term commitments with the food industry for fear of missing market opportunities. Policies organising the contractual relations between farmers and industries need to be set up in order to put both parties at ease. This applies to tomatoes for concentrate, dates and other fruits for drying, peas for freezing and so on.
- The "Made in Jordan" country brand is very badly promoted, despite the existence of several historical and cultural pillars that could support this.
- There is an absence of any official market information platform for MSMEs on processed food trends and figures, especially related to foreign markets and to certain Jordanian strategic food products such as dates, tomatoes, dairy products and Arabic sweets.



2) LOW TECHNOLOGICAL AND MARKETING CAPACITIES WITHIN MSMEs

- Few MSMEs are seeing the importance of portfolio diversification from a marketing and market access perspective. Going the extra mile to introduce and market new products could contribute to an increase in market share across product ranges.
- The endorsement of new technologies or packaging designs requires investment in new equipment and new processes; this applies to all sub-sectors. Start-up companies, which are usually initiators, have the most difficulty locating funds.
- There are gaps in the monitoring of the cold chain in the dairy sub-sector, especially in shops and outlets outside Amman; there is a need to equip transport vehicles as well as cold stores with adequate monitoring equipment as part of the improvement of relevant supply chains and specifically product shelf life.
- The number of industrial SMEs benefiting from applied research collaboration with universities of research centres seems to be quite limited; small and microcompanies are practically excluded from such collaboration, essentially because of their lack of awareness/trust in existing resources, and the absence of financial resources. One such project is the Faculty for Factory (FFF) project at the University of Jordan, which started in 2003 and is still ongoing. Results have been modest, although a few companies have reported benefits.

3) WORKFORCE SKILLS DEVELOPMENT CHALLENGES

- Major issues are linked to the fact that a large number of small and medium food companies depend on non-Jordanian blue-collar workers, for example from Syria, or Jordanians from rural areas, often working informally. This creates a high rotation of workers inside companies, meaning there is a continuous requirement for training on safety issues as well as on operations.
- Attending specialised vocational technical schools is still considered by young Jordanians to yield few prospects for career advancement. Those who attend such schools do not exceed 17% of all graduates every year; only about 14% reach the labour market. The food processing sector should be playing a leading role in assuring that graduates of vocational education are trained in factories and securing good jobs. This will help the vocational sector to attract more students.
- Although it is open to all genders, women have fewer opportunities to attend vocational education, and this is especially apparent in the governorates. Women play an important role in the food sector, especially in microenterprises, and better inclusion of women in vocational education should contribute in building up this sector.

4) LOW ACCESS TO FINANCE

- As mentioned in section 2.3, MSMEs in Jordan receive only 13% of the country's total commercial loans. Some of the reasons are detailed in the next three points; but in general, this can be traced to the reluctance of commercial banks to work with small companies (lack of collateral) and informal businesses.
- Financial support systems in Jordan are still not very investment-friendly compared to other regional Mediterranean programmes such as FEMIP[115] (only 20% of Jordanian SMEs which apply for loans report no difficulty in obtaining them[116]).
- Despite the presence of the Jordanian Loan Guarantee Corporation[117] and the availability of MFIs[118] with government contributions, the loan process is slow and excludes a large segment of businesses, in particular microenterprises (informal and formal) and start-ups. Collateral requirements are also high due to the lack of audited statements, weak feasibility studies and lack of transparency[119].
- Private equity funds active in Jordan tend to focus on specific sectors and have a relatively short investment payback period, but most food processing ventures require four or five years before they can show a good internal rate of return on investment.
- There is an absence of sufficient subsidised loans and grants allocated to R&D; most such loans currently come from external donors.

115 Facility for Euro-Mediterranean Investment & Partnership.

116 European Investment Bank (2016): Neighborhood SME financing: Jordan. https://www.eib.org/attachments/efs/economic_report_neighbourhood_sme_financing_jordan_en.pdf.

117 A public company sponsored by the CBJ with commercial banks as shareholders.

118 Provided by Jordan Enterprise Development Corporation (JEDCO), King Abdullah II Fund for Development, Queen Rania Center for Entrepreneurship and iPARK, as well as the partially government-funded incubator Oasis 500 and non-governmental organisations (NGOs).

119 European Investment Bank (2016): Neighborhood SME financing: Jordan. https://www.eib.org/attachments/efs/economic_report_neighbourhood_sme_financing_jordan_en.pdf.



5 STRATEGIC INTERVENTIONS

Based on the overall sector analysis and recommendations for the priority sub-sectors, the following objectives should be realised in order to foster employment-oriented MSME promotion in the food processing sector in Jordan:

- Improving enterprises' competitiveness in the food processing sector.
- Enhancing competences of food processing MSMEs, employment and decent work.
- Improving the business climate through policies and governance.

The interventions address the observed key factors affecting MSMEs' performance and competitiveness in the food sector with a focus on innovation and on capacity building, and aim to establish common ground for collaboration; interventions relate to the respective priority sub-sector challenges as summarised earlier. The role of the government policy is also highlighted in creating an enabling regulatory and business environment and supporting environmental infrastructure. Interventions for microenterprises are addressed separately.

A- PROMOTING INNOVATION AS A MEANS TO ENHANCE PRODUCT DIVERSITY AND MARKET ACCESS

- Food processing MSMEs in Jordan are still focused on traditional products. Therefore, any well-researched innovative intervention might show a positive impact, especially given the weak competitiveness of Jordanian products vis-a-vis regional and international competitors. The introduction of new products is required with higher added value or niche markets locally or abroad. The arguments listed hereafter should provide a good ground for the development of strategic interventions in the direction of innovation.

- The main objective is to diversify or extend the product portfolio, creating products for which there is a local or export market demand, while taking into consideration the available resources and skills. This is applicable to all prioritised food processing sub-sectors.

- Securing the ability to outsource external marketing or technical support for innovation at the product level could also help in upgrading existing products to enhance competitiveness and compliance with international markets and prevailing market trends. Since international companies are always looking for products with a unique selling proposition (USP), MSMEs could, through product innovation, gain access to leading brands on international markets such as Danone, Lactalis and Arla Foods in the dairy or Del Monte in the F&V sub-sector.

- The means to promote innovation can be provided by linking industry needs with academic resources. The success of applied research projects requires both parties to have a good understanding of the required output and a subsidised source of finance or grants. MSMEs would benefit from being able to rely on public research centres such as: (i) National Energy Research Center (NERC), which undertakes development and research projects and provides training in the fields of new and renewable energy and efficient energy utilisation; (ii) the National Center for Agricultural Research and Technology Transfer (NCARTT); (iii) public universities; and (iv) technology schools. The success of such endeavours will be highly dependent on the awareness/understanding of cost and time frameworks and the industrial sectors relevant to the services and outputs offered. Such awareness/understanding will increase the efficiency of the collaboration.

- Through involving more companies in collaborations with local researchers by enhancing relations of mutual trust between industry and local developers, better use could be made of the support offered by external expertise, for example in August 2017 through the Great British Pounds (GBP) 3.5 million UK/Jordan memorandum of understanding (MoU) (Newton-Khalidy Fund)[120] or the Jordan/Spain memo on scientific research in December 2017.

B- FACILITATING ACCESS TO FINANCE FOR MSMEs

The idea is to encourage banks to provide short-term and long-term loans to food processing MSMEs through the improvement of project filing processes, to improve the financial credibility of the MSMEs. Consequently, levels of transparency and the number of approved loans may be increased through the intensification of capacity building at the enterprise level, in order to fill gaps in business skills. Capacity building may be linked to loans or take place through independent capacity building initiatives (BDS).

120 An MoU between the UK's Department of Business, Energy and Industry Strategies and the Jordanian MoPIC. Areas of cooperation will include research on Jordan's energy needs, cultural heritage, water security, agricultural technology and food security, biotechnology and biosecurity, and nanotechnology, and the development of the skills and abilities of researchers, according to the statement.

Another direction would be to provide larger guarantee funds for the Jordan Loan Guarantee Corporation in order to process more demands and reduce red tape at the levels of SMEs and MSMEs.

Investing in innovative activities in the food sector should not be very expensive compared to other sectors. Nevertheless, local applied researchers and product development projects may be supported through public or international donor programmes, financial voucher programmes or other incentives. Introducing programmes for grants or low interest loans to businesses/researchers interested in conducting applied research in the food processing sector could help to trigger new product development.

Access to finance should also become reliant on private equity funds and venture capital funds directed towards start-ups and the formalisation of certain microenterprises. Incubators could better support start-ups and small businesses in the private equity integration process.

The establishment of the credit bureau (CRIF[121]) for investigating applicant credibility could speed up the loan process and increase the segment of businesses obtaining loans. This will be particularly important to small companies or microenterprises, and even to informal businesses seeking loans from MFIs.

C- TECHNOLOGICAL ADVANCEMENT AND SKILL DEVELOPMENT

Technological advancement should move from upstream (raw materials) to downstream (market), be accompanied by improvements in knowledge of factory processes, product specifications and market requirements, whether domestic or international, and show thorough compliance with international standards to show credibility. Agricultural practices could be improved to reduce product contamination and improve consistency – this is applicable to both the F&V and the dairy sub-sector. Replacement of obsolete machinery is crucial to increase efficiency and reduce waste or energy consumption. Development of technical skills is required at all levels: maintenance process upgrade, testing of products, product development, lean manufacturing practices, clean production, good manufacturing and hygiene practices, HACCP/BRCGS compliance, etc. Competitiveness can also be improved by reducing the operational costs of food processing companies within production processes in terms of energy and water savings, for example through renewable energy projects.

- Advanced market access tools should also be developed to facilitate fast and inexpensive export market penetration through the development of virtual markets or e-commerce. Products such as premium pre-packaged and long-shelf-life Arabic sweets will benefit from such technology. The idea is to work with dynamic government and private sector institutions and BDS in order to upgrade performance through coaching and training, and improve access to market intelligence. Comparative product evaluation should be conducted to identify quality issues, consumer preferences and regulatory gaps in order to develop the right provisions for improvement and compliance.

- The skills of the available workforce should be raised to a level that makes productivity gains possible; for example, lean management could be introduced to train operators on efficient machine operation. The upgrade of skills will discourage wide labour rotation and hence sustain productivity and food safety.

- Curricula should be established in public TVET on food technology and food processing and made available in all governorates.

- Duplication in technical support to microenterprises, which might confuse them instead of improving them, should be avoided, especially at the level of microenterprises.

- TVET should be reformed to meet sector skills requirements in terms of laboratory techniques, food safety practices, production management skills and marketing[122].

121 A global company specializing in credit bureau and business information, outsourcing and processing services, and credit solutions. Established in 1988 in Bologna (Italy), CRIF has an international presence, operating in over four continents (Europe, America, Africa and Asia). CRIF, https://www.crif.com/#.

122 National E-TVET Council (2014): The Jordan National Employment-Technical and Vocational Education and Training (E-TVET) Strategy.

D- FACILITATE LINKAGES AMONG ACTORS THROUGHOUT THE VALUE CHAIN

Matching supply and demand shows obvious synergies with work-based learning, and indeed the two can be thought of as two sides of the same coin. In other words, increasing work-based learning can be expected to lead almost 'by default' to increasing the match between supply and demand, both qualitatively and quantitatively.

Linkages between medium-sized and large companies focused on growth and sustainability on one side, and microenterprises or other informal businesses (whether agricultural, semi-industrial or industrial) focused on family and survival on the other, would contribute in the development of a more collaborative market system. Large companies can benefit from the potential of microcompanies to provide high-added-value products through manual labour that large companies cannot integrate into their production system, and microcompanies might assure a certain turnover outside their traditional markets (examples of linkages have been highlighted in the analysis of the dairy sub-sector). Such linkages could be made possible through:

- Improved and targeted government programmes to boost the food industry's contribution to GDP through the support of agriculture. Government support can be provided through technical knowledge transfer and extension services to upgrade agricultural technology in terms of yield and varieties; the agri-sector can also be supported in the development of water-saving irrigation systems, agriculture being the largest consumer of water in Jordan.

- Raising the skills of the available workforce to a level that makes productivity gains possible; the focus should be on training and upgrade of technical skills in microenterprises with the help of medium and large companies, facilitating healthy business collaboration. Training should be focused on aspects indicated by the larger companies (the client) to assure safety, consistency and cost efficiency.

- Large companies supporting microenterprises in accessing markets, whether domestic or export, either directly or through the company's own brands (private labelling). Accessing export markets will require a certain knowledge transfer from larger companies to smaller businesses.

E- SECTOR-ORIENTED POLICIES AND REGULATIONS

The documents "Jordan 2025 – A National Vision and Strategy" and "Jordan Economic Growth Plan 2018–2022" include so many development policies that adding more may lead to overload. There are certain sector-specific directions that should be taken by the government:

- Develop inclusive policies allowing microenterprises and informal businesses to integrate into the food processing value chain, rather than focusing only on legalities. Measures could include facilitating access to finance through central bank policies or through enforcing loan guarantees, which will allow integration within the broad market system to promote interaction with other stakeholders in the value chain.

- Review, update and disseminate particular trade agreements (much as these may be beneficial in opening new markets) to protect certain vital sub-sectors, such as the dairy sub-sector in relations with KSA and the F&V sub-sector in relations with Turkey.

- Apply indirect taxes in a manner that favours imports of raw materials destined for industry. For example, the 4% imposed by the government on poultry sales is not completely lifted in sales to industry.

- Apply strict "market dumping" regulation as per JCI recommendations when it comes to importing surplus frozen poultry from Ukraine or Brazil.

- Make increased efforts for a regional and international diplomatic relaxation policy with the goal of generating good neighbourly trade relations.

- Consider JCI recommendations that JFDA not exceed its legal prerogatives when dealing with food industry violations. In other words, industrial institutions should not be closed without going through the prevailing legal procedures. There should be a greater reliance on guidance and monitoring for improving non-compliant performance.

- Ensure that compliance with technical regulations on food products applies to imported processed food products as much as local production (recommendation of the JCI).

- Develop contractual schemes to facilitate agreements between farmers and industries, especially those industries requiring specific crops.

F- FOSTERING PPD AND PPP PROJECTS

PPPs and PPDs may play an important role in bridging the gaps between those sectors of the value chain supplying raw materials and knowledge or bringing the product to the consumer, and the financial sectors. The following two ideas might be implemented through such partnerships and are mainly focused on promoting the image of Jordanian products and sustaining their market access.

- **Establishment of a food board or food sector PPD:** Dialogue should include the MoITS on one side and private-sector food processing companies on the other. The objective is to collaborate on enhancing market access for exporting Jordanian food companies by facilitating access to foreign market information. The PPD could include the launch of a process to develop a Quality Seal for Jordanian Foods in order to protect the country brand and the motivation of food companies to compete on quality; policy changes and revision of unfavourable FTAs would be advocated.

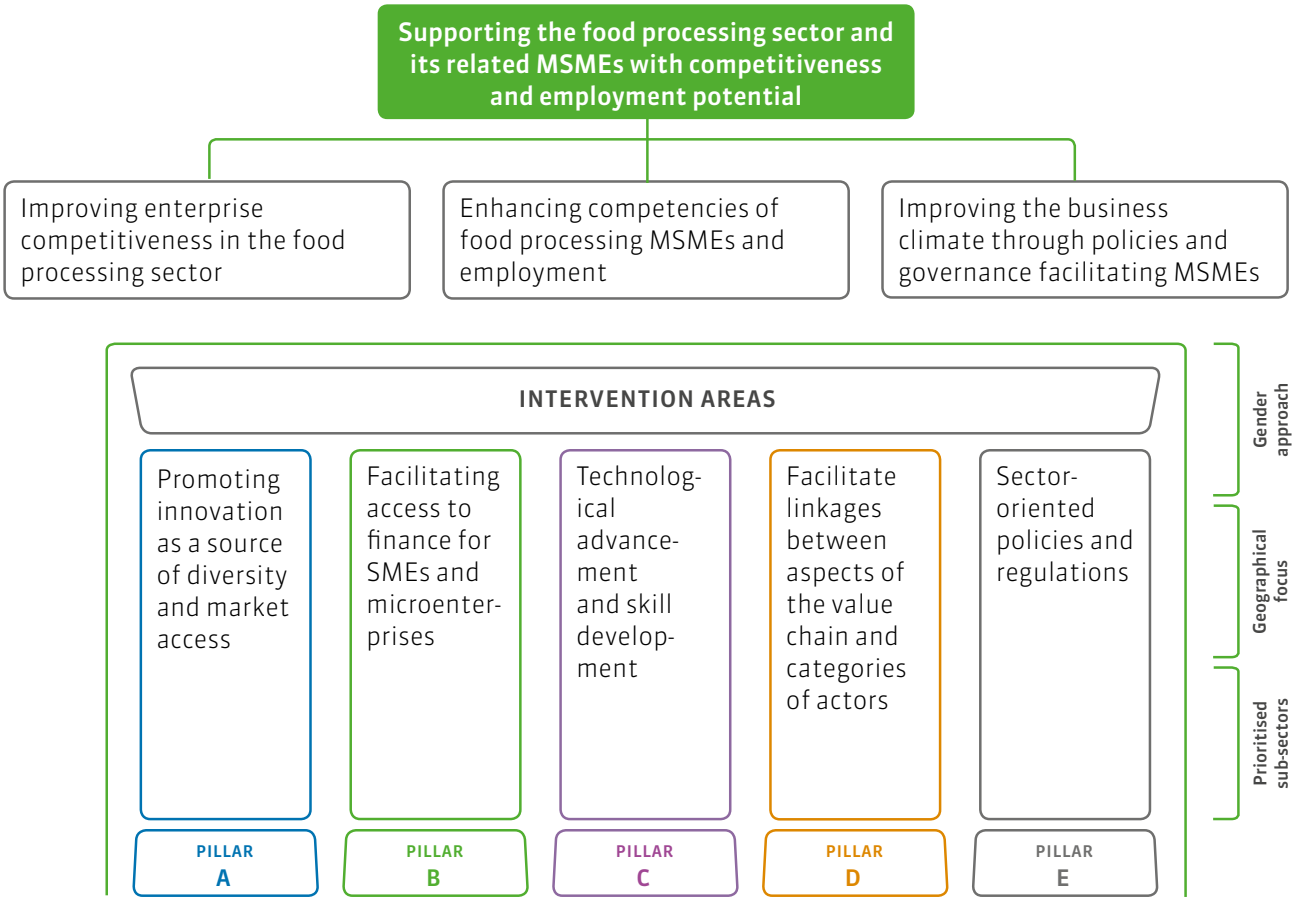
Eventually, an independent entity would be created in the form of a PPP, which would be responsible for providing the Quality Seal to the relevant food companies.

- **Leveraging the ISRDF at the HCST:** The HCST houses the ISDRF, which is currently operational and has provided modest funding and research linkages to a variety of companies.

The dominant challenge faced by the ISRDF is identifying responsive sectors and management as well as defining problems which can be addressed through research. The second challenge it faces is limitation of funding.

A structured programme could be designed and financed to be managed through the ISRDF to address specific challenges to the processed food sector, with the results being used to improve the competitiveness of the sector or targeted sub-sectors. This would require the correct identification of challenges facing the sector/sub-sector and validation by sector participants followed by a defined R&D proposal.

Figure 36: **Suggested interventions (long, medium and short term)**



5.1 IMPROVING MSMEs' COMPETITIVENESS IN THE PROCESSED FOOD SECTOR

Increasing the competitiveness of the processed food sector in Jordan will require a multi-faceted approach with concerted efforts being made at the macro (infrastructure), meso (institutional) and micro (enterprise) level. The interventions proposed for the latter focus on innovation in the form of product development and product diversification, and on smart investment in modern and energy-efficient technology.

As concluded earlier, the processed food sector is characterised by the presence of a large number of small and microenterprises which vary according to the sub-sector. These businesses need to be fully integrated within the official support system in both the financial and commercial aspects, and their potential harnessed, as their input in the economy can help to foster innovative skills, especially among women, and create the added-value products which are needed to boost the competitiveness of the food processing sector. The easiest wins may come from assisting existing enterprises to grow (from micro to small, from small to medium and from medium to large). The types of interventions depend on the evolutionary stage of the individual enterprises.

- At the micro stage, enterprise owners require knowledge and training in general food safety. This can be addressed through the JFDA and specialised consultants.
- Small enterprises wishing to grow require food safety training, the setting up of quality assurance systems and business planning, as well as organisational development interventions.
- Medium enterprises that wish to grow will require export coaching, export development services, innovation management, organisational development and a variety of internationally recognised quality certifications. Export development services and coaching as well as innovation management will need to be provided by foreign consultants in the short to medium term until local capacity is developed.
- At all levels, businesses can obtain advisory services from national and international consultants. Certifications are granted by certifying bodies such as Lloyds, SGS and TÜV.

Intervention Pillar C: **Conduct diagnostic assessment of food processing MSMEs in order to identify gaps and develop demand-driven actions** (SHORT / MEDIUM TERM)		
Description ▸ Provide detailed expert assessment for individual MSMEs in all aspects of management, production, sales and marketing and financial management, and identify the company-specific gaps affecting companies' ability to compete or be profitable. ▸ Based on the identified gaps, support companies in developing a prioritised and customised action plan for short- and long-term actions aiming at improving relevant competitiveness. ▸ Support companies in implementing action plans through provision of adequate expertise. ▸ Conduct market surveys aimed at identifying the actual size, market segments and innovation potential of the Arab sweets domestic market, as it is still badly underexploited and understood sub-sector. This will allow the development of a more focused intervention strategy for this promising (sub-) sector.	**Partners** JEDCO, JCI, and other BDS Private consultants in various fields	MSMEs from all sub-sectors

Intervention Pillar C: **Provide technical assistance for improving technological capacities of MSMEs** (SHORT / MEDIUM TERM)		
Description ▸ Make available expert assessment focused on the implementation of technological advancement in order to enhance company quality or processes to meet international market challenges as well as provide estimates of the investment required. ▸ Conduct feasibility studies to assure good return on investment. ▸ Provide technical assistance to small and medium-sized processors, based on their product quality, capacity, market requirements and labour skills, in identifying and testing adequate investments that could enhance the optimisation of their production lines. ▸ Initiate research studies in order to increase the shelf life of certain Arab sweets destined for export.	**Partners** MoITS NGOs CBJ Universities	MSMEs from all sub-sectors

Intervention Pillar A: **Foster innovation within food MSMEs** (MEDIUM TERM)

Description

- Facilitate linkages between universities/research institutes/independent consultants to step up development processes through the initiation of a scientific platform with a brief to bring together the different private sector actors with research centres. This could be linked to a PPP between the CoI and HCST.
- Support pilot projects to develop and test innovative processes such as aseptic processing, the use of nanotechnology in food production and quality enhancement. This activity will contribute in the enhancement of the final quality of processed F&V as well as dairy products, at the same time paving the way for package innovation.
- Establish product excellence competitions with rewards in order to motivate researchers to perform in new product development.
- Encourage universities and research institutes to cluster in science parks. Invite multinational companies operating in Jordan to support such clusters or even establish pilot research laboratories.
- Implement product development projects to reformulate products such as Arabic sweets as healthier, low-calorie or low-sugar products. Such projects could be launched to support any innovative idea within the other sub-sectors.

Partners
MoITS
JEDCO
NGOs
CoI
Multinational companies

MSMEs from all sub-sectors

Intervention Pillar C: **Support MSMEs in obtaining relevant quality certifications** (SHORT TERM)

Description

- Provide technical assistance to food MSMEs to improve their food safety management capabilities and their ability to acquire certifications such as HACCP, ISO 22000, FSSC 22000 or BRC.
- Provide technical support to agricultural MSMEs to ensure their compliance with quality certification such as ICM, pest management, GLOBALG.A.P., to promote finished products that are compliant in terms of pesticide residues, heavy metals and other potential contaminants.

Partners
MSMEs
MoA
NGOs

MSMEs from all sub-sectors

Intervention Pillar A: **Implement clean production practices** (SHORT / MEDIUM TERM)

Description

- Perform production audits to identify wastes in energy, water, food.
- Train operation staff on implementing measures to sustain energy-saving objectives.

Partners
MoITS,
MOE,
NGOs,
CBJ

MoITS,
MOE,
NGOs, CBJ
MSMEs from all sub-sectors and large companies.

Intervention Pillar D: **Improve performance and knowledge of microenterprises through linkages** (MEDIUM TERM)

Description

- Identify businesses that collaborate with microenterprises in F&V as well as HBBs in the dairy sub-sector. This could be part of the MSMEs diagnosis intervention mentioned above. Provide support to HBBs through the different programmes available or through private sector consultancies in order to upgrade their products and their compliance with market requirements in all aspects.
- Bring together microenterprises and HBBs to collaborate with medium and large companies willing to increase their portfolios using semi-finished products from smaller entities or based on a homemade product concept that might be commercialised on a relatively large scale. Such linkages will represent a win–win situation.
- At the micro stage, enterprise owners require knowledge and training in general food safety. This can be addressed through the JFDA and specialised consultants. Small enterprises wishing to grow require food safety training and business planning as well as organisational development interventions in which roles and responsibilities are defined. Organisational development might be as sophisticated as ISO 9000 certification, depending on what the enterprise owner wishes to achieve. Mature small enterprises may also require HACCP and GMP certification to control the quality of their products in local markets. HACCP and GMP certification will be required by the JFDA.

Partners
Chambers
Companies
MoITS
NGOs
JFDA
International certification companies (TÜV, SGS, etc.)

Microenterprises
HBBs
Medium to large companies

Intervention Pillar B: **Provide financial support for activities leading to enhancement of competitiveness and innovation** (MEDIUM / LONG TERM)		
Description ▸ Support local producers with grants or low-interest loans to enhance mechanisation, aiming at reduced workload. Such loans could be subsidised through central bank incentives to commercial banks, the provision of loan guarantees to reduce the risk on financial institutions, or partial grants linked to loans. ▸ Provide access to finance linked to energy saving and environmentally friendly investment. ▸ Facilitate access to finance through MFIs for amounts not exceeding USD 200,000 and through banks for larger amounts; allocate grants for innovative projects through donors or PPP projects. ▸ Develop innovation voucher programmes to support applied research linkages between industry and research. ▸ Initiate access to low-interest finance schemes/incentives for companies wishing to innovate in products and processes. ▸ Direct financial support to researchers on applied food development projects, to be provided by government funds or donor funds. ▸ Promote the role of incubators and accelerators in supporting food start-ups' access to equity funding.	**Partners** Commercial banks Donor grants Venture capital Business angels	MSMEs from all sub-sectors

Intervention Pillar E: **Export market access information and coaching system; support via food exhibitions** (SHORT / MEDIUM TERM)		
Description ▸ Provide a portal on technical requirements for export of food products to the major export markets. ▸ Support the export promotion association to provide market intelligence for industries in selected markets which can help them identify market potentials that can fit their competitive advantage and take strategic decisions in their product development or product extensions. ▸ Prepare embassy/consulate economic staff to provide market intelligence on hosting countries. ▸ Activate previous JEDCO programmes on virtual marketing. ▸ Support food processing companies through organised tours to major local and international food exhibitions (for a list, see Annex 7.11).	**Partners** MoFA JEDCO CoI	All exporting food processors

Intervention Pillar A: **Clustering of small enterprises according to cooperative principles** (MEDIUM TERM)		
Description ▸ Build women's coops within the different rural areas to create synergy among small producers and provide them with efficient means to purchase (and to sell) raw materials and ingredients from local suppliers.	**Partners** MoITS JEDCO NGOs CoI Multinational companies	MSMEs from all sub-sectors

5.2 ENHANCING COMPETENCES OF FOOD PROCESSING MSMEs AND EMPLOYMENT

The upgrade and development of competences is natural and mandatory for any improvement in competitiveness of MSMEs. The development of the food processing sector will also undoubtedly create more jobs.

The development of workforce skills at all levels must be aligned with technical development (mainly at the marketing and communication level) as well as blue-collar training on food safety and hygiene. The role of women in this sector needs to be embraced, especially in the governorates.

The proposed interventions require trainers to be developed within the public and private sector institutions who are able to provide demand-driven needs assessments through diagnostic visits; the training and coaching in each sub-sector will involve internal upgrade of technical know-how and the intrinsic requirements of food processing in terms of food safety and compliance with international regulations.

The further development of supporting institutions such as laboratories and E-VET schools is also proposed in order to address the prevailing inadequacies in these areas.

Intervention Pillar C: **Capacity-building programmes for BDS and MSMEs towards enabling gap analysis studies to highlight company weaknesses** (MEDIUM TERM)

Description	▸ Develop an intensive demand-driven training programme to build the capacity of external trainers/BDS that could become available upon demand to train MSMEs. The topics could cover management upgrade, technical optimisation, human resources management, financial management, sales and marketing, energy saving, and other topics that could be identified post needs assessment. ▸ Implement a coaching and training programme directed to MSMEs in the priority sub-sectors as a start. In the fields of food marketing, food quality enhancement and new product development, this will seek to ensure direct company needs are met more quickly.	**Partners** BDS NGOs CoI	MSMEs from all sub-sectors

Intervention Pillar C: **Provide onsite technical support to food processor agri-suppliers** (SHORT / MEDIUM TERM)

Description	▸ Provide F&V farmers with onsite training on pest management good practice. Low-pesticide-residue processed products have become a necessity for market access in practically all markets. This can only be achieved through an intervention with the farmers. ▸ Motivate farmers who supply industry to obtain ICM or integrated pest management (IPM) certifications by linking them with food producers/buyers who are looking for such conditions. ▸ Provide expert support to companies on how to achieve optimal operational levels through consulting services or public sector guidance. ▸ Work with international bodies such as Senior Experten Service (SES) in Germany or Netherlands senior experts (PUM) in the Netherlands providing retired professional experts in food processing and food engineering to assist Jordanian entrepreneurs in upgrading their technical know-how or in introducing new technologies. ▸ Provide coaching to milk producers, transporters and processors as well as retail on the management of the cold chain. This will upgrade quality and shelf life and possibly reduce the need for adding preservatives to increase shelf life in the dairy sub-sector and in all highly perishable food products.	**Partners** MoA BDS NGOs International associations	Private farmers in F&V Private sector dairy farmers

Intervention Pillar C: **Development of the technical and food safety skills of workers and line operators in order to reduce high labour rotation** (SHORT / MEDIUM TERM)

Description	▸ Expose food processing sector workers, line operators and line quality supervisors to intensive skills development programmes through GMP and in-house training. ▸ Provide machine operators and technicians in the food industry with preventive maintenance practices to reduce stop-overs and product contamination during production. ▸ Motivate larger companies to provide hands on technical know-how to smaller entities to support them in the production of safer products.	**Partners** MoTA, local governments (municipalities and governorates, JTB, tour operators, int'l development partner	Micro- and small-sized enterprises

Intervention Pillar C: **Enhance management and market access practices with MSMEs and microenterprises** (SHORT / MEDIUM TERM)		
Description ▸ BDS to provide extension services for commercial and management staff in food companies in terms of business planning, costing, pricing. ▸ BDS to provide industries with lean manufacturing practices with the objective of achieving optimal costs and minimal wastes. ▸ Provide information to relevant MSMEs, for example in Arabic sweets, on developing franchises. ▸ Training on food labelling and food claims, especially in relation to innovative and high-added-value products. ▸ Training on marketing and linking of MSMEs to different distribution channels and markets. Marketing in this case should focus on brand development through transition planning. ▸ Promote the culture of agricultural cooperatives among microbusinesses to aggregate efforts and enhance opportunities for market access and collaboration with larger entities. Emphasis should be placed on women's cooperatives.	**Partners** MoITS BDS Chambers NGOs MoA	All food processing MSMEs

Intervention Pillar C: **Enhancement of food quality testing** (SHORT TERM)		
Description ▸ Training and technical support for food labs to obtain accreditation on specific tests, mainly focused on food contaminants (biological and chemical, e.g. food-borne diseases and pesticide residues in agri-products).	**Partners** MoITS	All processed food SMEs

Intervention Pillar C: **Upgrade food processing VTEs curricula targeted at blue-collar labour to include traineeship programmes within the industry** (SHORT / MEDIUM TERM)		
Description ▸ Develop a customised curriculum for VTE training based on needs assessment of local food processors[123]. ▸ Foster a system of dual vocational training similar to those available in some developed countries to facilitate real, on-the-job training to vocational students in the field of food technology and food production. The Chambers of Industry should be involved, and training should extend to university students, who could be involved in academic projects conducted at industrial premises linked to product development, food safety systems, cost optimisation, lean manufacturing and so on. ▸ Develop special sessions for women entrepreneurs in the food business[124].	**Partners** Ministry of Labour MoITS Food companies NGOs	All processed food MSMEs

123 Ministry of Labour, Jordan (2015): The gap between labour offer and demand in the food and beverage sector.

124 Ibid.

5.3 IMPROVING BUSINESS CLIMATE THROUGH POLICIES AND GOVERNANCE FACILITATING MSMEs

The business enabling environment in Jordan is improving in small steps, in large part linked to the successful implementation of sector policies as well as the development of new ones. The FTAs signed by the government are providing a pathway for Jordanian products to external markets, but at the same time could be challenging local production, hindering the growth of certain industrial sectors such as food processing. Good governance of the public sector and PPPs could provide solutions.

Interventions proposed are along these lines with a focus on vocational school reforms to meet food processing needs, provision of market intelligence to support exporting businesses, microenterprise-friendly policies and private–public collaboration in applied research, as well as the positioning of 'Made in Jordan' as a quality brand to improve market access.

Intervention Pillar E: **Update trade agreements** (SHORT / MEDIUM TERM)		
Description	**Partners**	
▸ Review: Examine existing trade agreements and verify if they still meet the objectives they were initially established for, taking into consideration sector constraints and equal mutual treatment[136]. Listen to stakeholders and association claims. ▸ Update: Re-negotiate agreements where serious gaps exist and are affecting the growth of vital sectors. For example, the Turkey FTA 2009 was cancelled recently and is now being reviewed. The same could be done with agreements held with the GCC countries. ▸ Disseminate: Ensure all food processors in all governorates are aware of existing agreements so that they can benefit from their advantages[137].	MoITS Chambers of Industry	Exporting food industry SMEs

Intervention Pillar E: **Development of food safety standards and contaminant (including live animal disease) monitoring system for animal-origin products** (SHORT TERM)		
Description	**Partners**	
▸ Endorsement by JSMO of international standard for pesticide residues and other food contaminants to allow Jordanian producers/agri-businesses to align with international requirements. Improve awareness on international compliance. ▸ MoA to work with international expertise to establish a transparent contaminant mentoring scheme to keep potential epidemics under control. This will provide local processors a chance to export animal-based products to developed markets.	JSMO/JFDA MoA	Agri-businesses MSMEs producing animal-based products

Intervention Pillar E: **Policy development** (MEDIUM / LONG TERM)		
Description	**Partners**	
▸ Support law makers in capacity building on protective measures regarding artisan products and origin of products such as geographical indicators or protected designation of origin for relevant products. ▸ Advocate for fiscal incentives to innovative companies performing R&D, e.g. money spent on R&D to be tax-deductible. This has been applied in many countries whether developed or (sometimes) developing. ▸ Develop policies/regulations promoting e-commerce in terms of sales rules, online payment, MoUs on shipping and customs. ▸ Develop market access policies that subsidise the presence of food companies at international food exhibitions and the promotion of the Jordan brand. Implementation could be facilitated through a PPD. ▸ Activate anti-dumping regulations by applying Jordanian food standards to imported products. ▸ Develop polices regulating contractual agreements between farmers under the auspices either of the MoA or the MoITS in order to remove mutual fears over long-term commitments.	MoITS Ministry of Economy MoA Ministry of Finance Chambers PPD	All food MSMEs Farmers

125 See Annex 7.3 on Jordan trade policies – WTO.

126 See Annex 7.4 on Jordan international markets.

Intervention Pillar E: **Fostering public–private dialogue (PPD)** (SHORT / MEDIUM TERM)		
Description ▸ Develop a Jordanian Food Board under a PPD structure linking the MoITS and private-sector food processing companies; the function will be to enhance market access for private sector companies through facilitating access to free market information through public entities abroad. These can: ▹ Provide market intelligence and support in organising business to business (B2B) meetings (through commercial attachés in diplomatic missions); ▹ Provide a platform to advocate industrial or other policy changes that will be beneficial to the industry, linked to tax reductions or financial incentives for research; and ▹ Establish the procedures for the implementation of a quality seal certification. ▹ This could eventually convert into a PPP between the same parties, leading to the provision of a certification of quality for certain Jordanian products, based on strict regulatory and quality control rules and implemented by public and private agencies and local accredited laboratories. ▸ Support high-level product development in the various fields through a close collaboration between the HCST and its related funds ISRDF and NAFES, the public and private universities, and the private-sector food processing businesses. The purpose is to link industry with applied research based on a co-financing scheme.	**Partners** HCST Universities Chambers of Industry JEDCO MoITS MoFA	MSMEs from all sub-sectors

Intervention Pillar E: **Government support for water recovery systems** (SHORT / MEDIUM TERM)		
Description ▸ The lack of clean water in Jordan is becoming a hindrance to both agriculture and the agro-food industry, considering the demographic evolution of the country. Water and waste treatment structures are costly and require a collaboration between stakeholders that can only be managed by public sector institutions or within organised industrial cities. Building common waste water treatment systems within industrial sectors will force all industries to direct their waste water to those treatment systems and will save large investments on the industry as well as reinforce water recycling.	**Partners** Ministries Chambers Private sector	All MSME levels

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Bank al Etihad. https://www.bankaletihad.com

Beyond Capital. http://beyondcapital.vc/about

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https://www.brcglobalstandards.com/

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GCC Standardization Organisation.
https://www.gso.org.sa/store/gso

Global Food Safety Initiative. https://www.mygfsi.com/about-us/about-gfsi/what-is-gfsi.html

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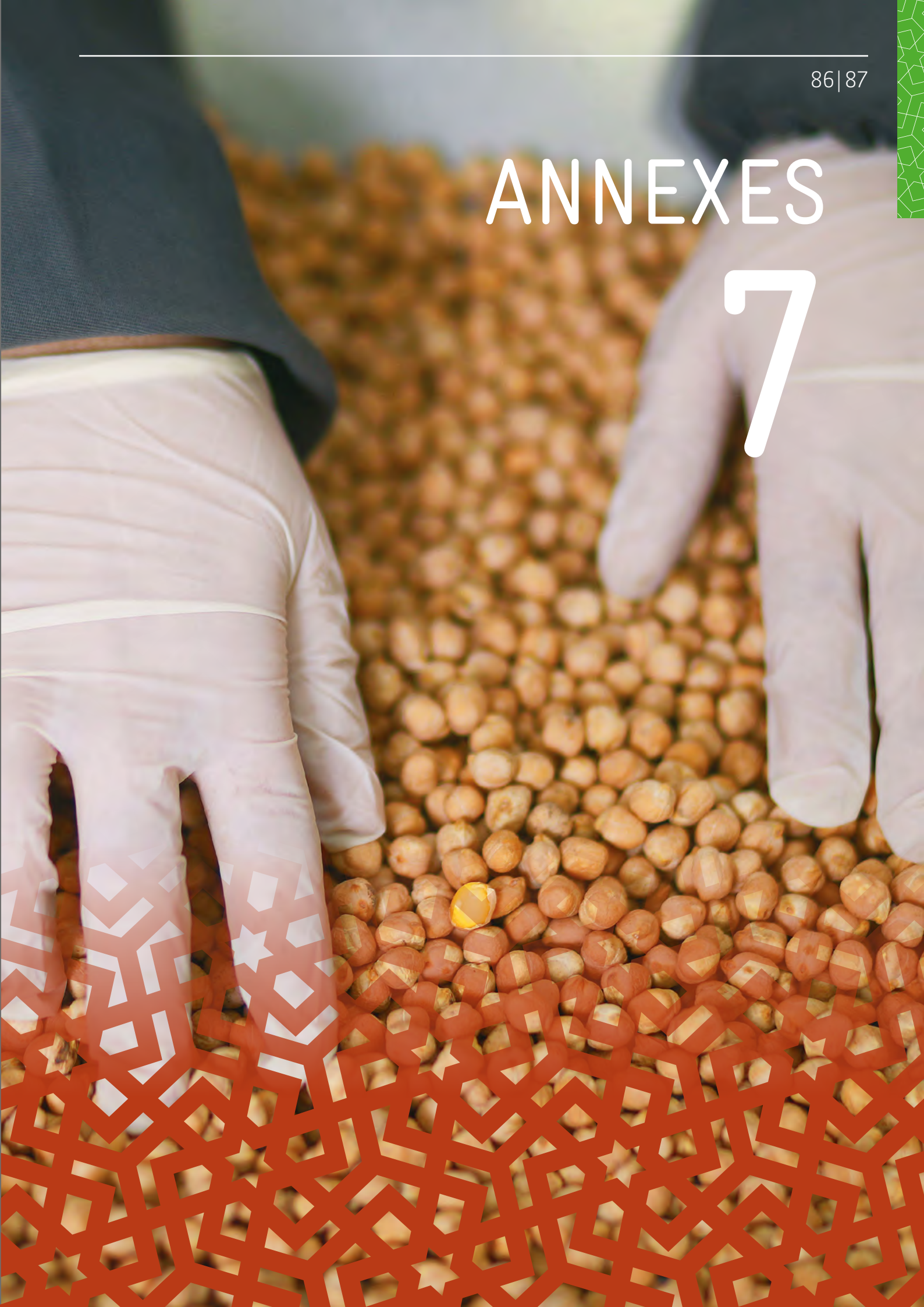
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ANNEXES

7



7.1 SECTOR INTERVIEWS AND VALIDATION MEETINGS

MAIN STAKEHOLDERS:

Validation Workshop	Representatives of	
Validation workshop to confirm sub-sectors	▸ Ministry of Industry, Trade and Supply ▸ Jordan Chamber of Industry ▸ Amman Chamber of Industry ▸ Jordan Exporters Association ▸ Jordan Food and Drug Association ▸ USAID Local Enterprise Support Project (LENS) ▸ Amman Chamber of Commerce ▸ Jordan SMEs Association ▸ Jordan Enterprise Development Corporation	

GOVERNMENT INSTITUTIONS, BUSINESS MEMBERSHIP ORGANISATIONS, DEVELOPMENT PARTNERS:

One-on-one Interview	Interviewee	Sector
Jordan Food and Drug Administration (JFDA)	Dr Rudinah Batarseh, Head of Food Manufacturing Sector	Government institution
Jordan Exporters Association (JEA)	Susan Hadadine, Assistance General Manager	Business membership organisation
Amman Chamber of Industry	Eng Fadel Labadi, Manager of Industrial Development Rose Smadi, Quality and Environmental Head Industrial Development Department	Business membership organisation
Jordan Chamber of Industry	Dr Maher Mahrouk, CEO Nada al Waked, Director of the Center of Technical Support	Business membership organisation
Jordan SMEs Association	Lina al Dusouki, CEO	Business membership organisation
The American Chamber of Commerce in Jordan (AmCham)	Rose al Issy, CEO Raghda Al Khojah, Business Development Manager	Business membership organisation
EU Jordanian Action for the Development of Enterprises (JADE)	Hamzeh Shamaileh, Project Manager Abdullah Tkeidek, SMEs Development Expert	Development partner
USAID Jordan Local Enterprise Support Project (LENS)	Edmund Morris, Micro and Small Enterprise Component Lead	Development partner
Food and Agriculture Organization of the United Nations (FAO)	Sally Berman, Partnership Officer	Development partner

ENTERPRISES:

One-on-one Interview	Interviewee	Size of Enterprise (micro/small/ medium/large)	Sector
Nafiesh Sweety	Dr Ahmad Salah, HR Manager	Large	Arabic sweets
Jabri Sweet Manufacturing	Mohammad Ali, Administration Manager	Medium	Arabic sweets
Nafeesa Sweets	Khaldoun Tahrawi, Manager of Branches	Large	Arabic sweets
Rukn Al-Sham	Ahmad Abu Khadra, Operations Manager	Medium	Arabic sweets
Afamia Al-Sham	Khalid Al-Jawwash, Production Manager	Medium	Arabic sweets
Al-Iker Sweets	Yazan Khanfar, Company Manager	Medium	Arabic sweets
Al-Naoura Alshamia for Eastern Sweets	Salah Barber, Production	Small	Arabic sweets
Paradise	Mohamad Jitan, Owner and General Manager	Medium	Arabic sweets and dairy products
Jewel of Mecca Bakery	n/a	Medium	Breads and Arabic sweets
Paradise Bakeries	Nasr Bajjali, Development Manager	Large	Breads and Arabic sweets
Al Taneib Company	Ahmad al Zaatara, CEO	Small	Capers and dried tomato
Hamoudeh	Mutaz Hamoudeh, Deputy General Manager and Owner	Large	Dairy products, cheeses and juices
Al Barakah For Dates	Nadine Naber, Owner	Small	Dates
Blue Mill	Ahmad Khudary, Owner and General Manager	Large	Dried vegetables, spices, vinegar and grains
Ayed Daana Mills	Shadi Sedr, Management	Micro	Flour
Hirbawi Mills	Nidal Mousa Hirbawi, Management	Small	Flour
Muqbel Mills	Abu Bakr, General Manager	Small	Flour
Hazza'a Group	Fida'a Mheidat, Operations Manager	Medium	Flour and pasta
Nabil Company	Ahmad Salak, General Manager	Large	Frozen meat, frozen vegetables, frozen sweets
Sons of Marwan Kabatilo	Anwar Jawabreh, Management	Medium	Herbs and spices
Kasih Company	Khaled al Kassieh, Owner	Large	Hummus, processed vegetables, jameed
Sujab Company	Subhi Jabri, Owner	Large	Ice cream and biscuits
Kama Company	Jumana Jacir, Founder	Micro	Luxury gourmet food (labneh, dates, molasses, spices, oils, jams, etc.)
Women-led microbusinesses in Jerash working from home	Inas Abu Aleim, Samar Al Hanatleh, Zuhour Issa Mohammad, Ibtisam Al Salamat	Micro	Milk, cheese and labneh
Al-Amana Dairy Factory	Bilal Ahmad, Manager and Owner	Medium	Milk, yoghurt and cheese
Mazra'ah Dairy	Mohammad Sabri, Production Manager	Medium	Milk, yoghurt and cheese
Wataniya Poultry	Representative of Production	Large	Processed chicken
Jawharet Tulkarem For Meat	Abu Ahmad, Production Manager	Large	Processed meats

ENTERPRISES:

One-on-one Interview	Interviewee	Size of Enterprise (micro/small/ medium/large)	Sector
SINIORA Meats	Tayseer Hamdan, Marketing	Large	Processed meats
Amana for Vegetables & Pickles	Bilal Ahmad, Manager and Owner	Medium	Processed vegetables & pickles
Kips	Ramez Srouji, Founder Firas Abu Wisah, Founder	Small	Vegetable chips
Badico Vegetable Oil Manufacturing	Representative of Production	Medium	Vegetable oils
Hamritna Dairy Company	Shadi Hassan, Marketing	Medium	Yoghurt and cheese
Manaf for Yoghurt & Cheese	Ahmad, Production Manager	Small	Yoghurt and cheese
Rubou' Dabaa for Yoghurt & Cheese	Mohammad Zaza, General Manager	Small	Yoghurt and cheese

7.2 LIST OF ENTITIES PROVIDING SUPPORT TO MSMEs

FINANCIAL SUPPORT

The following list outlines some of the entities providing support to MSMEs' access to finance.

The **National Fund for Enterprise Support (NAFES)**[127] assists in the modernising of Jordanian MSMEs by providing financial support for management development projects aimed at enhancing efficiency and competitiveness. Funding is normally provided for business plan development, strategy development, Quality Assurance/Quality Control system development, etc.

The **Innovative Start-ups and SMEs Fund (ISSF)**[128] is a USD 100 million private-sector-managed fund established to make investments in innovative start-ups and early-stage SMEs. The ISSF was established in response to a recommendation of the Jordanian Economic Policy Council. The CBJ has invested USD 48 million and the World USD 50 million in the Fund, bringing the total working capital of the ISSF to USD 98 million. The ISSF invests in Jordanian companies, provides investment support to partner investors, and improves the quality and variety of services provided by intermediaries and networks dedicated to the creation of deal-flow in Jordan's ecosystem.

Endeavor[129] provides selected entrepreneurs with customised services from a volunteer network of 2,500+ global and local business leaders. These leaders serve as mentors, advisors, connectors, investors and role models. The Endeavor Entrepreneur Services team works with selected entrepreneurs to assess the services – provided at a global and local level – that would be the most useful at a given time.

Dash Ventures[130] is an Amman-based venture capital firm with a focus on ICT, creative industries, energy efficiency and renewable energy and lifestyle consumer brands. Dash Ventures currently has a portfolio of 15 investments. Dash provides its investments with networking, management expertise and mentorship.

Beyond Capital[131] stimulates the entrepreneurial ecosystem in Jordan through broad support for entrepreneurs, finance entrepreneurs and angel investors. Beyond Capital leverages expertise, access to networks and capital, to nurture a dynamic environment, leading to job creation and improved equity investment, thus propelling a new generation of Jordanian businesses.

Ahli Microfinance[132] (AMC) was established in July 1999 to provide microfinance to fledgling businesses

127 National Fund for Enterprise Support, http://www.hcst.gov.jo/en/node/155.

128 Innovative Startups and SMEs Fund, https://issfjo.com/home/.

129 Endeavor Jordan, http://www.endeavorjordan.org.

130 Dash Ventures, http://dashventures.com.

131 Beyond Capital, http://beyondcapital.vc/about.

132 Ahli Microfinance Company, http://www.amc.com.jo/en/products-services/financial-services.

and entrepreneurs. Ahli provides several financing products which include an Ambition Loan, a Group Loan and an Education Loan.

Bank al Etihad[133] provides SME banking services which provide SME clients with access to innovative tools and a network of expertise to develop or scale a business. Bank al Etihad provides confidential advice from in-house experts, as well as a consultancy plan utilising the bank's large range of products. Moreover, the bank helps businesses access the SME ecosystem in Jordan.

Microfund for Women (MFW)[134] is a private non-profit company that operates under the umbrella of the CBJ. MFW is also part of Tanmeyah, the Jordan Microfinance Network. MFW began its operations in 1996 and provides financial services to low-income, small business owners in Jordan in order to empower them, with a particular focus on women. MFW has 140,000 clients, 96% of whom are women, who have benefited from MFW products and services. MFW manages a Learning Academy designed specifically for the training and development of MFW staff and beneficiaries.

Tamweelcom[135] is a microfinance institution established in 1999. It provides a variety of tailored products for various segments of the business community. Tamweelcom provides financing for informal unlicensed businesses, formal microbusinesses and formal small businesses. Tamweelcom financing for registered/formal businesses includes financing for the purchase of goods and raw materials, financing of equipment and machinery, and the expansion of project work with new services and locations.

TECHNICAL ASSISTANCE

The Business Development Center (BDC)[136] is a non-profit organisation committed to fostering economic development and public sector reform in Jordan and the Middle East. The BDC is a national and regional resource and has executed numerous projects with the national ecosystem of potential contributors and participants, such as business service providers, government entities, universities and international partners, to continue its mission of delivering effective development programming.

133 Bank al Etihad, https://www.bankaletihad.com.

134 Microfund for Women, http://www.microfund.org.jo.

135 Tamweelcom, http://www.tamweelcom.org.

136 Business Development Center, http://www.bdc.org.jo/Impact.aspx.

IRADA[137] is one of the main components of MoPIC's Enhanced Economic and Social Productivity Program, which provides investment opportunities in small and medium enterprises within local communities. Individuals seeking to obtain IRADA's services – including consultancy services and financing advisory and marketing services – must participate in its training and capacity building programmes, seminars, workshops and awareness programmes.

7.3 TRADE POLICIES RELATING TO JORDAN

- Jordan is party to a multitude of bilateral and multilateral FTAs[138] that contribute to economic development and greater integration in the global economy.
- The Greater Arab Free Trade Agreement (GAFTA) went into force in 1998 and includes 18 Arab countries (Jordan, UAE, Bahrain, KSA, Oman, Qatar, Morocco, Syria, Lebanon, Iraq, Egypt, Palestine, Kuwait, Tunisia, Libya, Sudan, Yemen, Algeria). As of January 2005, the agreement achieved full trade liberalisation of goods through multiple exemptions from customs duties and charges between all country members, except Sudan and Yemen[139].
- The Association Agreement between the EU and Jordan (Jordan–EU FTA) came into force in 2002. The agreement established an FTA liberalising two-way trade in goods, so that all trade in industrial products takes place free of any import duties while trade in agricultural, agro-food and fisheries products has been liberalised on a selective and progressive basis. In addition, the EU and Jordan also adopted an EU–Jordan Compact in July 2016, allowing for a relaxation of the rules of origin for exports to the EU on the condition that the production of Jordanian goods offer new job opportunities for Syrian refugees. The new scheme applies to 52 different product categories including textiles and garments, engineering and electrical products, chemical products, plastic products and furniture and wood products. Further, negotiations on a Deep and Comprehensive Free Trade Agreement (DCFTA) are in progress[140].

137 IRADA Program, https://jordan.gov.jo/wps/portal/Home/GovernmentEntities/Ministries/MinistryServiceDetails_en/ministry+of+planning+and+international+cooperation/services/irada+program?lang=en&content_id=com.ibm.workplace.wcm.api.WCM_Content/IRADA.

138 A full list of economic and trade agreements can be found on the MoITS website (https://www.mit.gov.jo/).

139 Oxford Business Group (2015): Jordan has signed a range of free trade agreements. https://oxfordbusinessgroup.com/analysis/focus-free-trade-raft-trade-agreements-have-strengthened-global-ties-0.

140 European Commission (2018): Jordan. 17 December. http://ec.europa.eu/trade/policy/countries-and-regions/countries/jordan/.

- Jordan signed an FTA with the European Free Trade Association (EFTA) – a group of countries comprising Iceland, Liechtenstein, Norway and Switzerland – which entered into force in 2002. By 2014, all customs duties on trade in industrial goods and fish and other marine products had been eliminated[141].

- The FTA between Arab Mediterranean countries (the Agadir Agreement) went into force in July 2006 and includes Egypt, Jordan, Morocco and Tunisia. The trade liberalisation arrangement comprises industrial products and agricultural and processed agricultural products. Membership is open to other Arab Mediterranean countries that have an association agreement with the EU and are members of the Arab League[142].

- The US–Jordan Free Trade Agreement went into effect in 2001 and was fully implemented by January 2010. In addition, the Qualifying Industrial Zones (QIZs) programme allows products manufactured in Jordan to enter the US duty-free, with a specified amount of their value added to come from Israel[143].

- Other countries with which Jordan has signed bilateral FTAs include Singapore (entry into force in August 2005)[144], Turkey (March 2011)[145] and Canada (October 2012)[146].

- The FTAs signed by Jordan are slowly reducing the weighted average applied tariff rate, which currently stands at a regionally average 4%. Import tariffs remain considerable for goods arriving from states not covered by FTAs, particularly for foodstuffs, clothing and other manufactured products. Prior to the FTA, tariff base for foodstuffs varied between 20 to 30% and for raw materials between 5 to 10%[147]. Beverages and tobacco face the highest tariffs, of up to 81.3%, with the next-highest duties dropping to 19.7% for F&V.

- Jordan joined the WTO in April 2000 and has been pursuing an open trade regime.

- Jordan has bound its most favoured nation (MFN) tariffs on almost all products and tariffs are levied on an ad valorem basis. The applied MFN tariffs generally range between 0% and 30%, but some products, such as lighters, tobacco products, alcohol and alcoholic beverages, face a tariff up to 200%. Jordan reduced its simple average applied MFN tariff rate from 14.7% in 2000 to 10.2% in 2014, with average rates of 17.4% for agricultural products (WTO definition) and 8.9% for non-agricultural products. Customs duties are assessed on the basis of the c.i.f. value of imports on the registration date of the customs valuation form. In 2015, there were 6,767 tariff lines in Jordan's applied MFN tariffs, out of which 33.7% of agricultural products and 56.4% of non-agricultural products were duty-free.

- Imports of some agricultural goods remain subject to additional licensing requirements, adding to the bureaucratic burden; however, a number of reforms, including fewer physical inspections of traded goods and the introduction of online customs services, have reduced non-tariff barriers for importers and exporters. This is indicative of continuing improvements to Jordan's operating environment for businesses engaged in international trade. However, logistics and security issues will continue to hamper Jordan's cross-border trade in the short term.

- The Jordanian government has worked to reduce the burden of bureaucracy and other non-tariff barriers for importers. Customs regulations have been standardised and streamlined to improve efficiency.

- Companies seeking to import must obtain an importers card from the MoITS in order to clear customs. Import licences are not required for most goods, with a few exceptions, including telecommunications equipment and some processed food products. Sanitary requirements and technical inspections can cause delays for food imports.

- With the challenges to Middle East and European countries brought by the Syrian refugees, the EU is engaging in deeper diplomatic and trade cooperation with Jordan. In 2016, the EU committed to increasing aid to Jordan and easing origin rules for Jordanian goods. This has allowed products with a minimum Jordanian content of 30% to enter

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141 European Free Trade Association: Free Trade Agreement. Jordan. https://www.efta.int/free-trade/free-trade-agreements/jordan.

142 The Arab Mediterranean Free Trade Agreement, http://www.agadiragreement.org/.

143 Office of the United States Trade Representative: Jordan Free Trade Agreement. https://ustr.gov/trade-agreements/free-trade-agreements/jordan-fta.

144 Enterprise Singapore: Singapore–Jordan Free Trade Agreement. https://www.enterprisesg.gov.sg/non-financial-assistance/for-singapore-companies/free-trade-agreements/ftas/singapore-ftas/sjfta.

145 The Jordan–Turkey FTA has been suspended by Jordan as of March 2018. Hurriyet Daily News (2018): Jordan halts free trade deal with Turkey, citing 'unequal competition'. 13 March. http://www.hurriyetdailynews.com/jordan-halts-free-trade-deal-with-turkey-citing-unequal-competition-128664.

146 Government of Canada: Canada–Jordan Free Trade Agreement. https://international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/jordan-jordanie/fta-ale/background-contexte.aspx?lang=eng.

147 Export.gov: US–Jordan Free Trade Agreement. https://build.export.gov/main/FTA/jordan/eg_main_017716. Showing base tariff per HS code and reduction schedule.

the EU under the EU–Jordan FTA until 2030[148]. Such change offers positive long-term prospects for Jordan's exports to the European market.

- Jordan has not applied anti-dumping measures or countervailing duties, though safeguard measures are in place.
- Jordan has signed preferential trade treaties, including a number of FTAs with its major trading partners.
- The agreement on establishing QIZs in Jordan was reached by Jordan, the US and Israel in 1997. Products manufactured in QIZs enjoy duty-free access to the US market with no quota limit, provided that specific requirements on the rule of origin have been satisfied. The importance of QIZs has declined in the wake of the Jordan–US FTA concluded in 2001, under which qualified Jordanian goods entering the US market are both duty- and quota-free.
- In recent years, Jordan has further opened up its economy to attract foreign direct investment (FDI). The Investment Promotion Law provides tax exemption on fixed assets from foreign investors for three years and duty-free import of raw materials into Jordan.
- Regional instability, including the civil war in Syria and the expansion of Islamic State (IS) in Iraq, has resulted in border closures which have significantly disrupted international trade. Overland supply chain routes to trade partners in the Middle East have been cut off, and access to the Iraqi market, in particular, has been restricted since 2014. The border crossing with Iraq reopened in 2017 following the removal of IS militants from the border province of Anbar, which will ease trade flows somewhat.

Source: WTO – Trade Policy Review, Fitch Solutions, Global Trade Alert.

148 European Commission (2018): Jordan. 17 December. http://ec.europa.eu/trade/policy/countries-and-regions/countries/jordan/.

7.4 INTERNATIONAL TRADE RELATING TO JORDAN

Jordan is an open economy with a substantial share of international trade. Jordan started liberalising its markets in the 1990s and became a member of the WTO in 2000, signing a number of multilateral and bilateral FTAs. In 2017, the total value of exports amounted to USD 7,469,000,000, while the total value of imports was USD 20,407,000,000. In 2017, Jordan's services exports were USD 6,786,056,338 in Balance of Payments (BoP) and its services imports were USD 4,735,492,958 in BoP. Jordan's exports of goods and services as a percentage of GDP are 35.68% and imports comprise 57.26%[149]. Against the background of regional geopolitical conflicts, Jordan continues to show signs of gradual but steady improvements in economic activity. However, ongoing conflict in Syria and Iraq has negative spillover to the economy, impeding its external trade and investment sentiment.

In 2017, the top-five HS two-digit-level products exported by Jordan to the world were, along with their trade value:

- Articles of apparel and clothing accessories, knitted or crocheted (USD 7,469,238,000).
- Pharmaceutical products (USD 668,150,000).
- Fertilisers (USD 656,757,000).
- Salt, sulphur, earths and stone, plastering materials, lime and cement (USD 445,393,000).
- Inorganic chemicals, organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes (USD 375,733,000).

In the same year, the top-five HS two-digit-level products imported by Jordan from the world were:

- Mineral fuels, mineral oils and products of their distillation, bituminous substances, mineral waxes (USD 3,406,994,000).
- Vehicles other than railway or tramway rolling stock, and parts and accessories thereof (USD 2,073,925,000).
- Machinery, mechanical appliances, nuclear reactors, boilers, parts thereof (USD 2,016,722,000).
- Electrical machinery and equipment and parts thereof, sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles (USD 1,225,687,000).
- Plastics and articles thereof (USD 708,052,000)[150].

149 World Integrated Trade Solution: Jordan trade statistics 2017. https://wits.worldbank.org/CountryProfile/en/JOR.

150 ITC Trade Map 2017.

The top-five countries to which Jordan exported in 2017 were:

- US (USD 1,603 million).
- Free zones (USD 933 million).
- KSA (USD 846 million).
- Iraq (USD 542 million).
- India (USD 519 million).

The top-five countries from which Jordan imported goods in 2017 were:

- China (USD 2,764 million).
- KSA (USD 2,755 million).
- US (USD 2,000 million).
- UAE (USD 994 million).
- Germany (USD 900 million)[151].

In 2017, Jordan's two largest exporting industries were textiles and clothing, followed by pharmaceuticals. Jordan's major trading partners were the Arab countries, accounting for more than one-third of its external trade. The second-most important region comprised non-Arab Asian countries. KSA, the US and China – being the largest contributors – accounted for about one-third of Jordan's external trade. The US, KSA and Iraq were the top-three export destinations, accounting for 40% of exported goods. Due to the ongoing conflict, exports to Iraq had considerably decreased in comparison to 2016 figures. China, KSA and the US are the major importers in Jordan, contributing 13.54%, 13.5% and 9.80%, respectively[152].

Jordan's external trade analysis suggests that one of the most important challenges for the country is to implement measures that will open new markets for exporting enterprises. Jordan has various FTAs and could gain increased benefits from these arrangements. Given the vulnerable political and economic situation in the region, the diversification of export destinations has become even more crucial. Therefore, it is necessary to improve international competitiveness by strengthening innovation and production capacities and access to financing. The MoITS has developed the National Export Strategy for the years 2014–2019 to support engagement in international trade. The document highlights that access to various types of finance to facilitate exports is limited. On the demand side, poor awareness of trade finance opportunities imposes further constraints on trade capacity. The absence of official trade finance statistics limits the possibility of carrying out a comprehensive analysis of this segment[153].

7.5 PRODUCT HS CODES

Figure 37:
Products indicated in the sub-sector analyses

Processed F&Vs	HS codes
Tomato concentrate, chopped and peeled tomatoes	071220200-900
Canned vegetables	71310100
Dried tomatoes	80410900
Dried stuffed dates	804210900
Dried figs	80420200
Dried apricots	80711000
Vegetable pickles	20570000
Cucumber pickles and gherkins	200110000
Canned olives	200570000
Frozen vegetables	71010000
Frozen fruits	81190000
Fruit jams and preserves	210320000
Tomato sauce and ketchup	210320000
Vinegar	220900900
Other food preparations	3210690999
Thyme mix	91099100
Molasses	200989200
Dairy products	**HS codes**
Pasteurised and UHT milk	40110000
Yoghurt	40310000
Labneh	40390100
Jameed	40390900
Various white cheeses, e.g. halloumi and akkaoui types	4049000
Arabic sweets	17049000

151 World Integrated Trade Solution: Jordan Trade at a Glance. Most Recent Values. https://wits.worldbank.org/CountrySnapshot/en/JOR/textview.

152 Own calculations based on 2017 data from ITC Trade Map.

153 European Investment Bank (2016): Neighborhood SME financing: Jordan. https://www.eib.org/attachments/efs/economic_report_neighbourhood_sme_financing_jordan_en.pdf.

7.6 TURNING TOMATOES INTO MONEY: TOMATO AND PESTO SAUCE

GHOR SAFI WOMEN'S INNOVATIVE FOOD BUSINESS

The homemade sauces idea came from Dalal Obaid, a local resident who in 2017 began to realise the agricultural potential of her area.

"When I returned to Jordan after my studies in India, I noticed the market surplus of some food products like tomatoes and cucumbers, which led to a sharp decrease in selling prices. This made me realise that there was potential to make innovative items from the surplus, to boost producers' revenues", Obaid recounted, noting that "this was also a way to help local producers further support their families".

The project includes 44 women who prepare products such as dried tomatoes, pastries, desserts and low-salt pickles in their own kitchens. Obaid, who worked for 15 years in exports and management at a consulting firm, explained: "I knew that motivation was not enough and that I needed to design an organised, systematic and specialised work formula," she remembered, adding that she decided to start **a professional training programme** that would help local women start **"on sound and solid ground"**. To fund the training, she applied to the USAID Jordan Local Enterprise Support Project grant programme that aims to support HBBs in local communities.

"For me, it was about tackling the specific problem of turning tomato surplus into a product that can generate customer demand, thus turning a cheap item into a valuable product on the market", the young entrepreneur recalled.

In 2017, Obaid launched her training programme and the women of Ghor Safi started receiving courses in **food safety and hygiene**, where they were acquainted with the **highest international quality standards**. A year later, they began producing their innovative line of tomato sauce and pesto, offering a much more valuable product on the local market.

"Despite the short period of time since we have started our project, individuals and families in Ghor Al Safi have already been able to see the difference", Obaid said, highlighting that women's husbands have been the biggest supporters of the project, as well as local farmers, who collaborate with the women by providing the fresh vegetables they need.

Fayzeh Mashaaleh and her husband Ibrahim are two of the beneficiaries of the project. Their family income has increased since Fayzeh started working with Obaid.

"The advantage of the project is that the products these women manufacture in their kitchens have greatly increased the value of the surplus products we used to have in the area", the entrepreneur explained, elaborating: "for example, one kilo of tomatoes is sold for about 30 piasters. Instead of selling the surplus fresh tomatoes at such a low price, the women dry the tomatoes and transform them into pestos and other sauces. This means that now they can sell a kilo for JOD 3, which generates much more revenue for them, and therefore more income for their families."

Source: http://www.jordantimes.com/news/local/turning-tomatoes-money-ghor-safi-women%E2%80%99s-innovative-food-business

7.7 ITC LIST OF MAJOR EXPORT DESTINATIONS FOR VARIOUS JORDANIAN PROCESSED FOOD PRODUCTS 2017

Figure 38: **List of importing markets for a product exported by Jordan – Product: 0403**

Buttermilk, curdled milk and cream, yoghurt, kephir and other fermented or acidified milk					
Importers	**Export value in 2013 (in USD thousand)**	**Export value in 2014 (in USD thousand)**	**Export value in 2015 (in USD thousand)**	**Export value in 2016 (in USD thousand)**	**Export value in 2017 (in USD thousand)**
World	3,377	1,833	3,471	3,652	2,599
US	727	546	1,017	1,422	836
KSA	379	528	567	874	632
UAE	550	331	426	570	444
Free Zones	77	0	565	225	335
Qatar	20	29	227	250	186
Bahrain	121	126	116	133	146
Australia	0	0	0	0	10

Source: ITC Trade Statistics 2017

Figure 39: **List of importing markets for a product exported by Jordan – Product: 2008**

Fruits, nuts and other edible parts of plants, prepared or preserved, whether or not containing added sugar or other sweetening matter of spirit (excluding prepared or preserved with vinegar, preserved with sugar but not laid in syrup, and jams, fruit jellies, marmalades, fruit purée and pastes, obtained by cooking)					
Importers	**Exported value in 2013 (in USD thousand)**	**Exported value in 2014 (in USD thousand)**	**Exported value in 2015 (in USD thousand)**	**Exported value in 2016 (in USD thousand)**	**Exported value in 2017 (in USD thousand)**
World	1,158	1,217	1,137	7,405	7,620
Iraq	0	227	243	5,598	5,578
KSA	24	50	133	728	1,158
Free Zones	981	870	644	423	365
UAE	1	5	0	96	208
Qatar	0	0	31	182	93
Palestine, State of	0	0	0	21	90
Kuwait	1	0	7	105	51

Source: ITC Trade Statistics 2017

Figure 40: **List of importing markets for a product exported by Jordan – Product: 200819**

Nuts and other seeds, incl. mixtures, prepared or preserved (excluding prepared or preserved with vinegar, preserved with sugar but not laid in syrup, jams, fruit jellies, marmalades, fruit purée and pastes, obtained by cooking, and groundnuts)					
Importers	**Exported value in 2013 (in USD thousand)**	**Exported value in 2014 (in USD thousand)**	**Exported value in 2015 (in USD thousand)**	**Exported value in 2016 (in USD thousand)**	**Exported value in 2017 (in USD thousand)**
World	757	854	657	6,432	6,892
Iraq	0	0	0	5,541	5,578
KSA	0	42	47	175	680
Free Zones	669	748	538	232	253
UAE	0	0	0	92	193
Kuwait	0	0	7	105	51
Palestine, State of	0	0	0	21	42
Qatar	0	0	0	15	25

Source: ITC Trade Statistics 2017

Figure 41: **List of importing markets for a product exported by Jordan – Product: 2001**

Vegetables, fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid					
Importers	**Exported value in 2013 (in USD thousand)**	**Exported value in 2014 (in USD thousand)**	**Exported value in 2015 (in USD thousand)**	**Exported value in 2016 (in USD thousand)**	**Exported value in 2017 (in USD thousand)**
World	162	471	1,731	2,373	1,177
KSA	12	202	1,208	798	438
Qatar	0	50	60	96	230
Kuwait	0	0	220	24	156
Israel	0	0	0	0	142
US	0	0	94	56	84
UAE	31	1	130	157	51
Sweden	0	0	0	24	31
Germany	0	65	18	58	20

Source: ITC Trade Statistics 2017

Figure 42: **List of importing markets for a product exported by Jordan – Product: 170490**

Sugar confectionery not containing cocoa, incl. white chocolate (excluding chewing gum)					
Importers	**Exported value in 2013 (in USD thousand)**	**Exported value in 2014 (in USD thousand)**	**Exported value in 2015 (in USD thousand)**	**Exported value in 2016 (in USD thousand)**	**Exported value in 2017 (in USD thousand)**
World	6,221	7,011	8,037	14,165	14,280
Iraq	51	548	2,121	5,874	4,962
US	788	1,043	1,058	691	2,211
Yemen	540	726	424	2,067	1,642
KSA	519	1,095	1,005	885	1,243
Qatar	199	246	413	576	820
Palestine, State of	56	90	201	300	469
UAE	401	239	235	312	428
Kuwait	87	121	292	279	396
Russian Federation	146	0	0	243	361
Lebanon	367	245	242	297	266

Source: ITC Trade Statistics 2017

Figure 43: **List of importing markets for a product exported by Jordan – Product: 0406**

Cheese and curd					
Importers	**Exported value in 2013 (in USD thousand)**	**Exported value in 2014 (in USD thousand)**	**Exported value in 2015 (in USD thousand)**	**Exported value in 2016 (in USD thousand)**	**Exported value in 2017 (in USD thousand)**
World	28,243	31,881	25,145	25,603	28,873
Kuwait	3,867	3,105	7,801	13,617	13,816
KSA	3,668	4,769	4,634	5,251	5,227
UAE	1,747	2,113	2,207	2,954	4,152
Qatar	962	1,746	2,526	2,671	2,642
Iraq	15,589	17,828	7,227	489	1,910
Oman	0	160	0	92	252
Free Zones	1,562	979	177	0	244
Bahrain	2	59	85	102	163
Egypt	51	15	33	0	163
Turkey	0	0	0	0	130

Source: ITC Trade Statistics 2017

Figure 44: **List of importing markets for a product exported by Jordan – Product: 210690**

Food preparations, n.e.s.					
Importers	**Exported value in 2013 (in USD thousand)**	**Exported value in 2014 (in USD thousand)**	**Exported value in 2015 (in USD thousand)**	**Exported value in 2016 (in USD thousand)**	**Exported value in 2017 (in USD thousand)**
World	73,325	84,569	91,484	61,949	60,131
KSA	14,332	14,363	17,121	16,381	16,253
Palestine, State of	6,330	5,951	6,950	7,311	7,637
Iraq	24,071	27,736	21,065	5,006	4,119
Germany	402	1,173	2,265	3,344	3,753
UAE	2,730	4,130	3,541	3,836	3,583
Yemen	1,615	1,839	959	1,966	2,156
Qatar	1,232	1,437	1,641	1,473	2,117
Kuwait	2,415	2,796	2,706	3,225	2,028
Netherlands	272	593	914	1,307	1,777
Free Zones	12,116	7,556	4,405	1,338	1,575
Syrian Arab Republic	2,008	3,897	13,703	2,891	1,575

Source: ITC Trade Statistics 2017

7.8 MAIN EXPORTERS OF FRESH AND DRIED DATES

Figure 45: **HS 080410 – Fresh and dried dates**

Exported value in 2017 (USD thousand)						
Country	**Jordan**	**UAE**	**KSA**	**Iran**	**Algeria**	**Israel**
All	12,816	167,522	182,379	250,492	52,337	271,319
US					2,574	7,675
KSA	627					
UAE	3,399		41,201	15,720	1,686	
Germany					1,742	10,922
Canada				4767	1,248	
Qatar	946		5,812			
Kuwait	580		19,512			
Australia				4,385		
Jordan			16,576			
UK	774		4,196			
Iraq				16,938		
Yemen			10,860			
Palestine	179					
Lebanon	1,563		10,446			
Russia				8,726	5,392	
Turkey	973	3,390		23,219		4,702
Israel						
Egypt	187					
Iran						
Algeria						
Afghanistan				15,678		
Azerbaijan				5,129		
Mauritania					1,705	

Exported value in 2017 (USD thousand)						
Morocco	1,273	25,056			4,314	
France	657		7,745		21,075	69,813
Poland	361					
India		44,593	4,405	43,516	881	
Bangladesh		24,219			1,070	
Indonesia		11,105		3,792		
Oman		6,707				
Sri Lanka		5,616				
Somalia		5,007	9,438			
Syria		4,007				
Tanzania		3,852				
Kenya		3,085				
Pakistan				34,591		
Kazakhstan				26,302		
Malaysia				6,167		
Ukraine				3,265		
Spain					4,334	12,558
Netherlands						45,251
Italy						10,285
Switzerland						5,563

Source: ITC Trade Statistics 2017

7.9 MAIN EXPORTERS OF CHEESE AND CURD

Figure 46: **HS 080410 – Cheese and curd**

Exported value in 2017 (USD thousand)						
Country	**Jordan**	**Syria**	**Turkey**	**Iran**	**Algeria**	**Israel**
All	28,873	75,328	153,642	196,017		271,319
US			3,360			7,675
KSA	5,227	2,183	37,430			
UAE	4,152	4,002	10,583			
Germany				216		10,922
Canada		252				
Qatar	2,642	2,631	9,958	262		
Kuwait	13,813	7,700	11,995			
Australia						
Jordan		1,232	6,192			
UK					37,297	
Iraq	1,910	32,593	43,183	166,494		
Yemen						
Palestine						
Lebanon		24,442	3,209			
Russia				3,732	32,251	
Turkey						4,702
Cyprus			5,791			

Exported value in 2017 (USD thousand)						
Iran						
Turkmenistan				1,107		
Afghanistan				21,915		
Oman	252					
Syria			2,492			
Pakistan				654		
Kazakhstan				350		
Malaysia				6,167		69,813
Ukraine				3,265		
Spain					4,334	
Bangladesh		24,219			1,070	
Indonesia		11,105		3,792		
Oman		6,707				
Sri Lanka		5,616				
Somalia		5,007	9,438			
Syria		4,007				
Tanzania		3,852				
Kenya		3,085				
Pakistan				34,591		
Kazakhstan				26,302		
Malaysia				6,167		
Ukraine				3,265		
Spain					4,334	12,558
Netherlands						45,251
Italy						10,285
Switzerland						5,563

Source: ITC Trade Statistics 2017

7.10
STEPS TO ESTABLISH A NEW BUSINESS IN JORDAN

Figure 48: **Steps to establish a new business in Jordan**

Provisional License
- Register manufacturing facility with the MoITS.
- After receiving the provisional license from the MoITS, a bank account can be opened.

Official registration
- After the bank account is opened and 50% of the registered capital is deposited, the MoITS issues the official registration.

Registration Certificate
- The industrial company must be registered with the chamber of industry or with the chamber of commerce, according to its location (Amman, Zarqa or Irbid).
- Upon registering the new company and paying the dues, the chamber issues the registration certificate.

Preliminary location license
- Representatives of the Ministry of Environment (MoEnv) visit the location to determine its suitability for food processing activities. If conditions are not met, MoEnv informs the company to make the necessary adjustments for a second visit – an audit which will grant the company the location license.

Preliminary factory license
- The Jordan Food and Drug Administration (JFDA) visits the location to determine if it is suitable for processing food based on a series of requirements, such as the equipment and process layout.
- If any changes were requested, the company must make the necessary adjustments and invite JFDA again for an audit. Once all requirements are met, the companies obtain a health license.

Occupational safety certificate
- Representatives from the General Directorate of Civil Defence visit the location to determine if all occupational health and safety requirements are met, including factory design, layout, exits, fire fighting equipment, storage areas, and so on.
- If not all requirements are met, the Civil Defence will request certain adjustments for the audit. Once the company passes the audit, it receives the occupational safety certificate.

Vocational license
- The municipalities (e.g. Municipality of Greater Aman) are responsible for issuing the vocational licenses after visiting and inspecting the site.
- If any changes are requested, the company must make the necessary adjustments before the audit, in order to receive the vocational license.
- Needs to be renewed annually.

Factory license
- The company is still not allowed to produce, until they start a test production run and call on the JFDA to test the end product. After the test, and if successful, then the JFDA issues a factory license, allowing the company to manufacture and sell its products.
- Every year, the company must pass the JFDA audit.

7.11
LIST OF INTERNATIONAL AND REGIONAL FOOD FAIRS

REGIONAL FOOD FAIRS:

- **Gulfood** in Dubai, UAE: Hotel and equipment exhibition and salon culinaire (February 2019).
- **Olivtech** in Izmir, Turkey: Olive, olive oil, dairy products, wine and technology fair (March 2019).
- **Dubai Drink Technology** Expo in Dubai, UAE: Drink technology expo (March 2019).
- **Ekoloji** in Izmir, Turkey: Certified organic products (May 2019).
- **WorldFood** Istanbul in Istanbul, Turkey: International food products and processing technologies exhibition (September 2019).
- **Food Istanbul** in Istanbul, Turkey: Food and beverage, food processing, storage, cooling technologies, logistics and store equipment fair (September 2019).
- **FoodTech Eurasia** in Istanbul, Turkey: Food technology and food safety fair (October 2019).
- **Food and Nutritional Ingredients** in Istanbul, Turkey: Food and nutritional ingredients, raw materials and technologies exhibition.
- **Middle East Organic and Natural Products Expo** in Dubai, UAE: Exhibition for organic and natural products in the region (December 2019).
- **yummex Middle East** in Dubai, UAE: Sweets and snacks trade fair.
- **IsraFood** in Tel Aviv, Israel: International exhibition for food and beverage (November 2019).
- **Specialty Food Festival** in Dubai, UAE: Exclusive event for gourmet professionals (April 2020).
- **Horeca** in Amman, Jordan: Exhibition for the hospitality and food and beverages service industry (October 2019); also in Beirut (April 2019), Kuwait (January 2019) and KSA (November 2019).
- **SIAL** in Abu Dhabi, UAE: Innovation in the food, beverage and hospitality industry (December 2019).
- **Iraq Agro-Food** in Erbil, Iraq: Exhibition for agro-food products and technology (September/October 2019).
- **Foodex Saudi** in Jeddah, KSA: Exhibition for food and beverages (November 2019).
- **Saudi Agrofood** in Riyadh, KSA: Trade exhibition for food products, ingredients and technologies (October 2019).
- **Saudi Food** in Jeddah, KSA: Food trade fair (March 2019).

INTERNATIONAL FOOD FAIRS:

- **International Production and Processing Expo** in Atlanta, US: Trade show for poultry, meat and feed industry (February 2019).
- **Anuga Food Fair** in Cologne, Germany: International trade show for the food service and catering industry (October 2019).
- **ISM Cologne** in Cologne, Germany: Trade fair for sweets and snacks (February 2020).
- **WorldFood Moscow** in Moscow, Russia: International trade fair for food and drinks (September 2019).
- **SIAL** in Paris, France: Food innovation exhibition (October 2020).
- **Fancy Food Show** in New York, US: Specialty food industry event (June 2019); also in San Francisco, US (January 2019).


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