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► Regional value chains for recovery:

Creating jobs and shared growth
in Syria, Lebanon and Jordan

Focus sectors: medicinal and aromatic plants,
fruits and vegetables, construction materials,
and olives and olive oil.

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Foreword

The Arab States region is currently facing a period of profound uncertainty and hardship. Ongoing political tensions and the recent escalating war and its shockwaves, including the war affecting Lebanon, have deepened fragility across the region, with far-reaching consequences for economies, labour markets and the livelihoods of millions of people. These developments underscore the urgency of identifying pathways to recovery that are both resilient and inclusive.

This study was conducted in late 2025, prior to the most recent escalation of the current conflict. While the context has since evolved significantly, and the sectors analysed in this report have been affected in important ways, the core findings and recommendations remain highly relevant. At the heart of this analysis lies a central premise: that the comparative advantages of Syria, Lebanon and Jordan, when strategically aligned, offer a powerful foundation for economic recovery that no single country could achieve in isolation.

The study therefore adopts a regional perspective, recognising that economic systems, value chains and labour markets across Syria, Lebanon and Jordan are deeply interconnected. Rather than pursuing fragmented, country-specific interventions, it explores how cross-border complementarities can be leveraged to strengthen entire value chains. Syria's production potential and labour base, Lebanon's strengths in processing, branding and market access, and Jordan's capacities in input supply, standards and logistics create opportunities for mutually reinforcing development. In a context of constrained resources and heightened risk, such regional approaches are not only more efficient, but more resilient, more scalable and more likely to generate sustainable employment at scale.

Based on a structured assessment process, four sectors were identified as offering particularly strong potential for inclusive and job-rich development across the three countries:

- **Medicinal and aromatic plants:** The study identifies strong potential to expand production in Syria to supply reliable raw materials for processing in Lebanon and Jordan, while leveraging Lebanon's strengths in value addition and branding and Jordan's capacities in certification and regulated processing to access higher-value markets.
- **Fruits and vegetables:** Restoring input systems and post-harvest infrastructure in Syria is key to stabilising supply, complemented by Lebanon's role in aggregation and market access and Jordan's strengths as a supplier of agricultural inputs, technical expertise, logistics, standards and climate-smart production.
- **Construction materials:** Immediate reconstruction demand in Syria can be supported through regional supply, particularly from Jordan's industrial production and Lebanon's technical services, alongside a gradual rehabilitation of domestic production capacity in Syria.
- **Olives and olive oil:** The sector requires a strong focus on improving productivity and quality, especially in Syria, combined with efforts to strengthen branding, certification and premium market positioning, drawing on regional expertise.

At a time of conflict and fragmentation, this study seeks to highlight an alternative perspective: that fostering economic exchange, strengthening trade linkages and building on complementarities can generate mutual benefits across borders. Even in difficult times, regional cooperation for development in key economic sectors offers a practical pathway toward recovery, stability and shared prosperity.

Merten Sievers

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The original study was developed by the Devoneers team, including Alaa Fahmy, Rouba El Kharrat, and Amira Fekry, with fieldwork conducted by Yasser Abdel Karim, Mohamad Abdulbaset, and Murad Samhoury.

The study responds to the profound economic, labour market and social challenges facing Syria, Lebanon and Jordan following successive years of conflict, displacement and economic shocks. While these crises have disrupted productive systems and constrained job creation, they have also highlighted the deep economic interconnections between the three countries, particularly across agriculture, agro-processing and construction value chains. The accumulation of skills, experience and market linkages among Syrian refugees in Lebanon and Jordan further underscores the potential for more integrated, regionally anchored recovery pathways.

Against this backdrop, the study adopts a regional value chain perspective, aligned with the ILO’s Approach to Inclusive Market Systems (AIMS), to explore how cross-border complementarities can be leveraged to generate inclusive and sustainable employment. Rather than examining sectors in isolation within national borders, the analysis considers how value chain functions are distributed across the three countries and where strategic regional linkages can unlock job creation, support enterprise development and improve access to decent work opportunities, particularly for women, youth, refugees and returnees.

The overarching objective of the study is to inform the design of a regional strategy for inclusive job creation through value chain development in Syria, Lebanon and Jordan. It seeks to identify priority sectors with strong employment potential, assess the structure and dynamics of key value chains across borders, and provide strategic guidance for market-based interventions that align private sector incentives with decent work outcomes in fragile and displacement-affected contexts. The study is intended as a strategic prioritisation and design tool to support programme development, stakeholder engagement and further analysis by the ILO and its partners. The analysis reflects market conditions and stakeholder perspectives at the time of data collection and is intended to provide strategic direction in a rapidly evolving and fragile regional context.

The report also benefited from substantive inputs, technical discussions, and operational support from a wide range of ILO colleagues. Contributions were provided by Nadja Nutz, Luana Ayala, Elisa Mandelli, Sumaiya Virji, Fernando Martínez Cure, Mohamed Anas Sabee, Badra Alawa, José Manuel Medina Checa, Mette Grangaard Lund, Bahjat Loutfi, Hala Obeid, Merten Sievers, among others, across headquarters and country offices.

The authors are grateful to all stakeholders who shared their time, knowledge, and perspectives for this study, including government institutions, private sector actors, employers’ and workers’ organizations, and community members across Lebanon, Jordan, and Syria.

Disclaimer

The findings and conclusions presented in this report are based on rapid market assessments and stakeholder consultations conducted in Lebanon, Jordan and Syria between August and November 2025. Given the fluid and fragile nature of market systems in the region shaped by ongoing political, economic and environmental change, the analysis reflects conditions at the time of data collection and should be considered indicative rather than definitive.

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01

► Introduction

1.1 Regional context and rationale

The economies of Syria, Lebanon and Jordan are closely interconnected through shared geography, historical trade relations, labour mobility and overlapping value chains, particularly in agriculture, agro-processing and construction. Over successive years of conflict and crisis, displacement and economic shocks have profoundly affected all three countries, disrupting markets, weakening productive systems and placing significant strain on labour markets and social cohesion across the region.

The Syrian conflict has had far-reaching regional spill-over effects. Lebanon and Jordan have hosted large numbers of Syrian refugees, reshaping labour markets, service delivery systems and local economies. At the same time, economic contraction, fiscal pressures and external shocks have constrained growth and job creation in all three countries. Across the region, unemployment and informality remain high, especially among youth and women, while access to stable and decent livelihoods is increasingly limited.

Yet the region also retains significant economic potential. Syria, Lebanon and Jordan possess complementary comparative advantages across a range of value chains. Syria continues to benefit from a diversified economic base, agricultural resources and a large workforce with strong traditions in farming, manufacturing and construction. Lebanon brings established strengths in processing, branding, services and regional market access, while Jordan plays a key role in the supply of agricultural inputs, industrial production and regulated processing, supported by relatively strong standards and institutional frameworks.

Importantly, years of displacement have generated new forms of regional integration. Syrian refugees in Lebanon and Jordan have acquired valuable skills, practical experience and market exposure in key sectors, often filling critical gaps in labour supply and contributing to productivity in host-country value chains. This accumulation of human capital, alongside existing cross-border commercial linkages, creates opportunities to reimagine recovery and development not as isolated national processes, but as a shared regional endeavour.

Against this backdrop, there is growing recognition that strategies for job creation, livelihoods recovery and economic revitalisation in the Levant must take a regional perspective. Strengthening cross-border value chains, leveraging complementarities between countries and aligning private sector incentives across borders can help unlock employment opportunities that benefit workers, enterprises and communities in Syria, Lebanon and Jordan alike.

1.2 The ILO's approach to regional market-based job creation

The International Labour Organization (ILO) promotes decent work, social justice and inclusive growth through approaches that place employment at the centre of economic recovery and development strategies. In contexts affected by fragility, conflict and displacement, the ILO increasingly applies market-based approaches that seek to generate sustainable jobs by strengthening value chains and enabling the private sector to play a central role in inclusive growth.

This study is grounded in the ILO's Approach to Inclusive Market Systems (AIMS), which adapts market systems development principles to fragile and displacement-affected contexts. AIMS focuses on identifying and addressing systemic constraints within value chains, strengthening the incentives and capacities of market actors, and ensuring that vulnerable groups — including refugees, returnees, women and youth — can participate meaningfully in and benefit from economic opportunities.

A defining feature of AIMS is its emphasis on job creation and decent work outcomes, rather than growth alone. The approach explicitly integrates conflict sensitivity, political economy analysis and risk management, recognising that markets in fragile settings are shaped by uncertainty, institutional weaknesses and uneven power relations. By working through existing market actors and commercial relationships, AIMS seeks to catalyse change that is scalable, resilient and sustainable beyond the lifespan of project interventions.

The ILO is already applying the AIMS approach across Lebanon and Jordan through a range of initiatives supporting inclusive job creation in agriculture, agri-food, manufacturing and services. These interventions have established partnerships with private sector actors, generated market intelligence and developed delivery mechanisms that provide a strong foundation for more integrated regional approaches.

▶ 02

A Syrian worker carries boxes of parsley in Halba, North Lebanon. © ILO/Elisa Oddone

► Approach and objectives

2.1 Analytical approach: a regional value chain perspective

The study adopts a regional value chain perspective that reflects the economic interdependence of Syria, Lebanon and Jordan and the realities of job creation in a context shaped by fragility, displacement and prolonged economic stress. Rather than analysing sectors within national boundaries alone, the assessment examines how value chain functions are distributed across the three countries and how complementarities between them can be leveraged to generate employment and income regionally.

This approach recognises that production, processing, input supply, services, logistics and market access are not evenly or independently located within each country. While Syria retains significant production potential and a large labour force, years of conflict have constrained access to inputs, energy, finance, technology and markets. Lebanon and Jordan, by contrast, host more advanced downstream segments of many value chains, including processing, certification, branding, export logistics and specialised services. They also provide key upstream functions such as the supply of agricultural inputs, industrial materials and technical expertise.

By analysing value chains across borders, the study seeks to identify realistic pathways for strengthening economic activity that are grounded in existing market relationships and private sector incentives. This reduces the risk of isolated or supply-driven interventions and increases the likelihood that job creation efforts are commercially viable and sustainable. Importantly, the approach does not assume a fixed or static regional division of labour. Instead, it explores how cross-border engagement can act as a transitional and catalytic mechanism, supporting gradual upgrading and localisation of value chain functions over time.

Displacement dynamics are an integral part of this analytical framework. Syrian refugees in Lebanon and Jordan play active roles in regional labour markets and value chains, particularly in agriculture, agro-processing and construction. Their skills, experience and networks link economic activity across borders and create opportunities for skills transfer, enterprise development and labour mobility that benefit all three countries. The regional value chain approach explicitly considers these dynamics as both a labour market reality and a development opportunity.

2.2 Objectives of the study

The overarching objective of the study is to inform the design of a regional strategy for inclusive job creation through value chain development in Syria, Lebanon and Jordan, in line with the ILO's mandate on decent work and inclusive growth and its Approach to Inclusive Market Systems (AIMS).

Specifically, the study aims to:

- Identify economic sectors and value chains with strong potential for employment generation across the three countries, taking into account labour intensity, resilience under current constraints and scope for regional complementarity.
- Analyse how key value chain functions are currently structured and distributed across Syria, Lebanon and Jordan, and where strategic cross-border linkages can unlock job creation and income opportunities.
- Assess the potential for inclusive employment within selected sectors, with particular attention to women, youth, refugees and returnees, and the types and quality of jobs that could be created along the value chain.
- Provide strategic guidance for the application of the AIMS approach in a regional, fragile and displacement-affected context, identifying entry points for market-based interventions that align private sector incentives with inclusive employment outcomes.

The study is intended as a strategic prioritisation and design tool rather than a comprehensive sector master plan. It provides an evidence base to guide programme development, stakeholder engagement and further technical analysis by the ILO and its partners.

2.3 Methodological approach

The study applied a qualitative, market systems-based methodology consistent with the AIMS framework and adapted to the constraints of working in fragile and conflict-affected settings. The methodology combined desk-based research with primary data collection and stakeholder consultations conducted across Syria, Lebanon and Jordan.

The methodology was implemented in two main stages. First, an initial profiling and sector selection phase was conducted to identify value chains with strong potential for inclusive job creation at the regional level. This phase applied a structured, criteria-based screening process, drawing on desk-based research and expert validation to assess sectors against four key dimensions: relevance to target groups, including refugees, returnees, women and youth; economic significance and potential for growth and job creation; cross-border economic viability, including trade linkages, value chain complementarities and logistics feasibility; and the feasibility and sustainability of potential interventions, taking into account institutional capacity, conflict sensitivity, environmental considerations and alignment with national and ILO strategic priorities. This process led to the prioritisation of four value chains: Medicinal and Aromatic Plants, Fruits and Vegetables, Olives and Olive Oil, and Construction Materials.

Second, Rapid Market Assessments (RMAs) were carried out across Syria, Lebanon and Jordan for the selected value chains. The RMAs combined secondary data review with primary qualitative research, including more than 130 semi-structured interviews and consultations conducted across Syria, Lebanon and Jordan. The stakeholders included producers, processors, traders and exporters, input suppliers, service providers (such as finance, logistics, certification and training), producer organisations, employers and worker representatives, public institutions and development partners. Fieldwork was conducted in major production and processing hubs across the three countries to capture diverse perspectives and realities. Data triangulation ensured analytical robustness and cross-country comparability.

Analysis focused on identifying key deficits and opportunities across core value chain functions, as well as the supporting services and rules that shape market performance and labour outcomes. Particular attention was given to understanding the systemic root causes of constraints, actor incentives and capacities, and the implications for inclusive employment.

Given access limitations, data constraints and rapidly evolving conditions, the analysis prioritised triangulation of qualitative evidence and practical feasibility over exhaustive quantitative modelling. Detailed technical diagnostics, cost-benefit analyses and investment planning were therefore intentionally kept beyond the scope of this study.

The findings presented in the subsequent chapters reflect this strategic and forward-looking orientation. They are designed to support decision-making on where and how regional value chain development can most effectively contribute to inclusive job creation and economic recovery across Syria, Lebanon and Jordan.



Since 2016, the ILO has supported Jordanian workers and Syrian refugees to access jobs and improve working conditions in agriculture. Cooperatives have been key partners, helping expand outreach, facilitate access to flexible work permits for Syrian workers, and raise awareness on policies, safety, and career guidance. © Abdel Hameed Al Nasier/ILO



Local farmers and foreign traders gather to buy and sell dates. ILO/APEX

► Regional context

3.1 Political and macroeconomic context

The political and macroeconomic context of Syria, Lebanon and Jordan is marked by sharp contrasts, yet deeply interlinked dynamics that shape opportunities for job creation and value chain development across the region.

Syria continues to face the most severe challenges. More than a decade of conflict has resulted in extensive destruction of productive assets, weakened institutions and a highly constrained macroeconomic environment. Economic activity remains fragmented and uneven across regions, while access to finance, foreign exchange, energy and imported inputs is severely limited. Although security conditions have improved in parts of the country and regional engagement has gradually increased, uncertainty remains high and private investment is constrained. These conditions significantly affect the pace and scale at which value chains can recover, requiring approaches that are incremental, risk-aware and grounded in existing market realities.

Lebanon is experiencing a protracted political and economic crisis characterised by institutional paralysis, macroeconomic instability and a sharp contraction of economic activity. The collapse of the financial system, currency depreciation and high inflation have eroded purchasing power and increased the cost of production across sectors. Compounding these structural challenges, Lebanon continues to face recurring security incidents and episodes of armed conflict, most recently the Israeli military escalation of 2024, which have further disrupted economic activity, damaged infrastructure, restricted access to markets and deepened uncertainty for businesses and workers alike. While Lebanon retains strong private sector capabilities in areas such as processing, services, branding and trade, firms operate in a highly volatile environment, limiting their ability to invest and plan for the long term. Political uncertainty and governance challenges further complicate the business climate, even as Lebanese enterprises continue to play an important regional role through adaptation and informal market arrangements.

Jordan presents a comparatively more stable political and macroeconomic environment. While economic growth has been modest and fiscal space constrained, Jordan benefits from relatively strong institutions, regulatory frameworks and policy continuity. The country has positioned itself as a regional hub for certain industries, including agricultural input supply, regulated processing and construction materials, supported by clearer standards and market governance. This relative stability enhances Jordan's capacity to engage in regional value chains as a supplier, processor and service provider, including in relation to neighbouring fragile contexts.

Taken together, these differing political and macroeconomic conditions underscore the importance of a differentiated yet integrated regional approach. While Syria faces the most acute recovery challenges, Lebanon and Jordan each bring distinct strengths and constraints that shape how regional value chains can function and evolve.

3.2 Infrastructure, trade and cross-border connectivity

Infrastructure quality and trade connectivity vary significantly across the three countries and constitute a major determinant of value chain performance and employment potential.

In Syria, years of conflict have resulted in widespread damage to transport infrastructure, energy systems, irrigation networks and industrial facilities. Electricity supply remains unreliable and uneven, increasing production costs and limiting processing and storage activities. Transport and logistics are constrained by damaged roads, high fuel costs and limited access to spare parts. These factors raise transaction costs, reduce competitiveness and constrain the ability of producers and firms to engage consistently in domestic and cross-border trade.

Lebanon and Jordan benefit from more intact infrastructure systems, though both face increasing pressure. In Lebanon, infrastructure degradation has accelerated in recent years due to underinvestment, fiscal constraints and governance challenges. Energy shortages, high fuel costs and congestion at ports and transport nodes affect production and trade, even as firms continue to rely on Lebanon's logistical and commercial networks to access regional and international markets. Jordan's infrastructure is comparatively well maintained, with relatively reliable transport corridors, industrial zones and border facilities, though capacity constraints and rising costs remain concerns.

Trade and border-crossing dynamics are particularly critical for regional value chain development. Prior to the Syrian civil war, Lebanon relied heavily on Syria as a land corridor connecting it to Jordan, Iraq and the Gulf Cooperation Council countries, a trade route that was severely disrupted following the outbreak of war in 2011. Cross-border trade between Syria, Lebanon and Jordan is subject to administrative barriers, changing regulations, high transaction costs and periodic disruptions. Border crossings can be unpredictable, with delays affecting the movement of agricultural produce, inputs and construction materials. Informal trade remains widespread, reflecting both necessity and adaptation to formal constraints, but it also introduces risks related to quality, standards and market transparency.

Despite these challenges, cross-border trade continues and remains economically significant. Private sector actors across the region have developed coping mechanisms, informal networks and alternative logistics solutions to sustain flows of goods and services. These existing trade linkages, while imperfect, provide a practical foundation upon which more structured, transparent and employment-generating regional value chain arrangements can be built.

3.3 Labour markets, displacement and demographic dynamics

Labour and demographic dynamics are a defining feature of the regional context and a central consideration for employment-focused value chain development.

Lebanon and Jordan host large populations of Syrian refugees, many of whom have become economically active in sectors such as agriculture, construction, manufacturing and services. Refugees often occupy labour-intensive and low- to semi-skilled roles, contributing to productivity while facing precarious working conditions and limited access to formal employment. Their presence has reshaped labour markets in host countries, increasing labour supply in certain sectors and influencing wage dynamics, informality and employment structures.

Over time, displacement has also enabled the accumulation of skills and experience. Many Syrian refugees have acquired new technical competencies, exposure to modern production methods and familiarity with quality standards and market requirements, particularly in agri-food and construction value chains. These skills constitute an important form of regional human capital that can support value chain upgrading and productivity gains.

Return dynamics are increasingly relevant, in response to the evolving conditions in Syria and shifting circumstances. While large-scale return remains constrained, partial and gradual return to Syria is already taking place, and many refugees are actively considering return in the medium term. Employment opportunities are a key determinant of whether return is sustainable. Without viable livelihoods, return risks being temporary or leading to renewed displacement. At the same time, returnees can play a catalytic role in recovery by transferring skills, know-how and networks acquired during displacement back into Syrian value chains.

Across all three countries, demographic pressures, high youth unemployment and limited formal job creation underline the need for labour-intensive growth strategies. Value chain development that generates employment across production, processing, logistics and services offers one of the most promising pathways to absorb labour at scale while improving job quality and income stability.





► 04

► Medicinal and Aromatic Plants (MAP)

4.1 Sector overview and regional relevance

Medicinal and aromatic plants (MAP) represent a strategically important sector for inclusive job creation and regional value chain development across Syria, Lebanon and Jordan. The sector is labour-intensive, suitable for small-scale production, and offers opportunities for value addition through processing, certification, packaging and branding. MAP value chains can generate employment across a wide range of skill levels and are particularly relevant for women, youth, refugees and returnees.

Demand for MAP raw materials and derived products, including dried herbs, essential oils, herbal teas, cosmetics and pharmaceutical inputs, remains strong in regional and international markets. The three countries exhibit strong complementarities within the MAP value chain, with Syria offering favourable agro-climatic conditions and production potential, Lebanon contributing strengths in processing, branding and market access, and Jordan playing a key role in regulated processing, certification and input supply.

4.2 Primary production and harvesting

Syria

Primary production of medicinal and aromatic plants is a core strength of the MAP value chain in Syria, underpinned by the country's diverse agro-climatic zones, rich biodiversity and long-standing traditions of cultivation and wild collection. MAP production is geographically widespread and adapted to local ecological conditions. Key production areas include coastal regions such as Latakia and Tartous, where favourable humidity supports crops like laurel, sage and rosemary; central regions such as Hama and Homs, known for cumin, anise and coriander; northern areas including Aleppo and Idlib, where thyme, nigella and chamomile are cultivated; and parts of Rural Damascus, Sweida and the Ghouta, historically associated with rose, mint and medicinal herbs.

MAP production in Syria is predominantly smallholder-based and labour-intensive, relying on family labour and seasonal workers. This makes the sector particularly accessible to vulnerable rural households and returnees, but also exposes producers to multiple constraints. Smallholder farmers face significant challenges in accessing quality agricultural inputs. There is a heavy dependence on informal input flows, as well as a declining domestic production capacity of inputs. Certified seeds for MAP crops are scarce, and farmers often rely on saved seed or informal sources, resulting in variable yields and inconsistent quality. Access to fertilisers and soil conditioners is limited by high prices, supply disruptions and import constraints, while mechanised equipment for land preparation, harvesting and post-harvest handling is largely unavailable or unaffordable.

Extension services that once supported MAP cultivation have been severely weakened, leaving farmers with limited technical guidance on improved cultivation practices, pest management, harvesting techniques and post-harvest handling. Climate-related stress, including increasing variability in rainfall and rising temperatures, further affects yields and quality, particularly in rain-fed production areas. Together, these factors constrain productivity and limit farmers' ability to meet the quality and volume requirements of processors and regional buyers.

Despite these challenges, Syria retains substantial untapped potential for MAP production. MAPs raw-material production remains widely distributed across governorates with suitable agro-ecological conditions and long-standing cultivation traditions. Across certain regions, farmers have shifted progressively away from wheat and barley, whose yields have been undermined by drought, heatwaves, and wildfire damage, toward high-value aromatic crops that offer better margins and require fewer inputs. Syria maintains long-standing comparative advantages in cumin, anise, coriander, juniper berries, black seed, and thyme, crops that are drought-tolerant, require less water than traditional cereals,

and are well adapted to the country's climatic conditions. Existing knowledge, suitable land and labour availability provide a strong foundation for recovery, provided that access to inputs, technical support and market linkages can be progressively restored.

Lebanon

MAP production in Lebanon is more limited in scale but relatively diversified and specialised. Production is concentrated in areas such as Akkar and the Bekaa Valley, where crops including oregano, sage, chamomile, anise and fennel are cultivated, as well as in mountainous regions where wild collection of thyme, sumac and other aromatic plants remains common. Lebanon exhibits a dual production system combining cultivated MAPs with wild harvesting, particularly for species that are difficult to domesticate or that command premium prices in niche markets.

Lebanese producers benefit from comparatively better access to inputs, including seeds, fertilisers and basic equipment, as well as stronger links to processors, traders and exporters. Knowledge of quality requirements, harvesting timing and basic post-harvest practices is generally higher than in Syria, reflecting closer integration with downstream markets. However, production costs are significantly higher, driven by land scarcity, high labour costs and rising input prices linked to macroeconomic instability.

Wild collection, while economically important, raises sustainability concerns. Overharvesting, weak regulation and limited enforcement of resource management practices threaten the long-term availability of certain species. At the same time, cultivated MAP production faces challenges related to fragmented landholdings, limited economies of scale and increasing pressure on natural resources. Energy shortages and rising costs further affect irrigation and on-farm processing activities, constraining expansion despite strong downstream demand.

Jordan

Jordan's MAP production is comparatively limited, reflecting structural environmental constraints, particularly water scarcity and arid conditions. Cultivation is concentrated in specific areas such as the northern highlands and parts of the Jordan Valley, where controlled irrigation allows for the production of selected crops including sage, thyme and chamomile. Production is generally small-scale and highly managed, with a stronger emphasis on efficiency and resource optimisation.

Environmental constraints play a central role in shaping MAP production in Jordan. Chronic water scarcity, rising temperatures and soil degradation limit expansion and require the adoption of climate-smart agricultural practices. As a result, Jordan has developed significant expertise in efficient irrigation systems, water-saving technologies and input optimisation capabilities that offer direct relevance for MAP producers in Syria and Lebanon, where water scarcity and irrigation constraints are increasingly limiting productivity and expansion. Jordanian research institutions and private firms are active in seed development, fertiliser production and crop protection, supplying both domestic and regional markets.

While Jordan's domestic MAP production potential is limited, its strength lies in providing high-quality inputs, including seeds, fertilisers and crop protection products, and water-efficient technologies, as well as agronomic expertise and environmentally adapted production technologies. These capabilities are highly relevant for regional value chain development, particularly for improving productivity and climate resilience of MAP production in Syria and, to a lesser extent, Lebanon.

4.3 Post-harvest handling and primary processing

Post-harvest handling and primary processing are critical determinants of quality, value retention and employment generation in the MAP value chain. Activities such as drying, cleaning, sorting, storage and basic processing are labour-intensive and offer important opportunities for job creation, particularly for women and seasonal workers. However, capacities and constraints at this stage vary significantly across Syria, Lebanon and Jordan.

Syria

In Syria, post-harvest handling and primary processing represent one of the most significant bottlenecks in the MAP value chain. In many production areas, drying and storage are carried out at household level using traditional methods, including open-air drying and rudimentary storage facilities. While these practices are low-cost and accessible, they expose products to contamination, weather-related damage and quality deterioration, resulting in inconsistent moisture levels, loss of active compounds and reduced marketability.

Access to appropriate drying infrastructure is limited. Energy constraints, including unreliable electricity supply and high fuel costs, restrict the use of mechanical dryers or controlled-environment facilities. As a result, producers are often unable to meet the quality specifications required by processors and buyers, particularly for higher-value uses such as pharmaceutical, nutraceutical and cosmetic applications. Sorting and grading are typically manual and informal, increasing labour intensity but limiting efficiency and traceability.

Small-scale processors do exist in Syria, producing dried herbs, herbal teas, essential oils and basic extracts. However, their operations are constrained by irregular raw material supply, limited working capital, outdated equipment and weak quality control systems. Access to food safety certification, laboratory testing and standardised packaging remains extremely limited, further restricting access to formal domestic and export markets.

Despite these constraints, the labour-intensive nature of post-harvest handling and primary processing offers significant employment potential. With targeted investments in low-cost, energy-efficient drying and storage solutions, combined with basic training in quality management, this segment could rapidly absorb labour while improving product quality and market readiness.

Lebanon

Lebanon exhibits comparatively stronger post-harvest and primary processing capabilities within the MAP sector. Small and medium-scale drying units, aggregation centres and primary processing facilities are more common, particularly in regions such as the Bekaa Valley and parts of the north. These facilities often supply domestic processors and exporters and are better integrated into formal value chains.

Lebanese operators generally apply more standardised drying, sorting and storage practices, resulting in higher and more consistent quality. Aggregation mechanisms allow small producers and wild collectors to pool volumes, facilitating quality control and market access. Manual labour remains important, especially in sorting and cleaning, providing employment opportunities, including for Syrian refugees.

However, post-harvest systems in Lebanon face growing challenges. Energy shortages, rising fuel prices and infrastructure degradation increase operating costs and reduce reliability. Many facilities operate below capacity or rely on ad hoc solutions to cope with power outages. In addition, the sustainability of wild collection remains a concern, as limited monitoring and regulation can lead to overharvesting and resource depletion, undermining long-term supply.

Despite these pressures, Lebanon's post-harvest segment remains a critical regional asset, providing a bridge between raw material production and higher-value processing and export functions.

Jordan

Jordan's role in post-harvest handling and primary processing is shaped by its stronger regulatory and quality assurance environment. While domestic MAP production and early-stage processing are limited in scale, Jordan hosts facilities and service providers that specialise in controlled drying, testing and compliance with stringent quality standards. These capabilities are particularly relevant for MAP products destined for pharmaceutical and nutraceutical markets.

Jordanian firms and laboratories offer testing, certification and quality control services that are often unavailable in neighbouring countries. These services support traceability, standardisation and compliance with international regulations. While labour intensity at this stage is lower due to higher levels of mechanisation, jobs created tend to be more skilled and formal, including in quality management, laboratory testing and technical supervision.

Environmental considerations also influence post-harvest practices in Jordan. Energy-efficient technologies and water-saving processes are increasingly prioritised due to resource constraints. This experience provides valuable lessons for adapting post-harvest systems in Syria and Lebanon to more resource-efficient and resilient models.

4.4 Secondary processing, certification and value addition

Secondary processing and value addition represent the most dynamic and economically significant segment of the MAP value chain, where higher margins, more stable employment and access to regional and international markets are generated. This stage includes activities such as advanced extraction, distillation, formulation, packaging, branding and certification. Capacities at this level vary substantially across Syria, Lebanon and Jordan, creating both constraints and opportunities for regional integration.

Syria

Syria retains a base of secondary MAP processing capacity, including enterprises producing herbal teas, essential oils, soaps, cosmetics and pharmaceutical inputs. Many of these firms have a long history and benefit from accumulated technical knowledge and local market recognition. However, years of conflict and economic isolation have severely constrained their operations.

A key challenge for Syrian processors is the irregular availability of quality-assured raw materials. Inconsistent supply limits production planning and leads to underutilisation of existing capacity. Compounding this, unreliable energy access, driven by fuel scarcity, conflict-related damage to infrastructure and limited access to oil fields, severely disrupts processing operations, particularly for energy-intensive activities such as distillation and extraction, where continuous and stable power supply is essential. Equipment is often outdated, spare parts are difficult to obtain and access to finance for upgrading or expansion is extremely limited.

Certification and compliance represent major bottlenecks. Syrian processors face significant difficulties in accessing accredited laboratories, certification bodies and internationally recognised quality assurance systems. This limits their ability to supply formal domestic markets and effectively excludes them from most export opportunities. Packaging and branding capacities are also constrained, with limited access to modern materials, design services and market intelligence.

Despite these challenges, Syrian secondary processors represent a critical foundation for future upgrading. Their presence enables value to be retained domestically and creates skilled employment opportunities in processing, quality control and management, provided that constraints related to inputs, certification and market access can be progressively addressed.

Lebanon

Lebanon is a regional leader in secondary MAP processing and value-added product development. Lebanese firms are particularly strong in the production of premium herbal teas, essential oils, cosmetics, soaps and wellness products, often targeting niche and high-value markets. Strong capabilities in branding, packaging and marketing, combined with access to international and diaspora markets, have enabled Lebanese MAP products to achieve regional and global recognition.

Lebanese processors benefit from relatively well-developed quality assurance systems and experience in navigating certification requirements for export markets. This includes compliance with food safety, cosmetic and phytosanitary standards, as well as organic and sustainability certifications. These capacities support higher margins and more stable employment in processing, design, marketing and export logistics.

However, the operating environment in Lebanon poses significant challenges. Macroeconomic instability, currency volatility, energy shortages and rising production costs affect competitiveness and investment capacity. Access to finance remains severely constrained, limiting firms' ability to scale operations or invest in new technologies. Despite these constraints, Lebanese processors continue to operate through adaptation, diversification and reliance on regional sourcing, including from Syria, to maintain production volumes and market presence.

Jordan

Jordan plays a complementary and strategically important role in secondary processing and certification within the MAP value chain. The country hosts advanced processing facilities and accredited laboratories that support pharmaceutical, nutraceutical and regulated herbal products. Jordanian firms operate within a comparatively strong regulatory environment, with established systems for quality assurance, testing and compliance with international standards.

These capabilities position Jordan as a regional hub for high-end MAP applications that require rigorous traceability, standardisation and certification. While domestic MAP production is limited, Jordanian processors and service providers are well placed to source raw materials regionally and add value through processing, formulation and certification. Employment generated at this stage tends to be more skilled and formal, including in laboratory services, regulatory compliance and technical management.

Jordan's experience with regulated markets and environmental compliance also offers important learning opportunities for regional value chain upgrading, particularly in relation to good manufacturing practices, documentation and quality management systems.

► Regional complementarities in the MAP sector

Rooted in resilience: The regional value chain for medicinal & aromatic plants (MAP)

	SYRIA The production powerhouse	Core value chain strength Diverse primary production & wild collection	Primary constraint Weak infrastructure & lack of certification	Key Takeaway Boasts diverse agro-climatic zones ideal for large-scale cultivation of cumin, anise, and laurel.
	LEBANON The branding & market hub	Core value chain strength Advanced processing, branding & marketing	Primary constraint High production costs & macroeconomic instability	Key Takeaway Leads in high-value secondary processing, premium branding, and access to international export markets.
	JORDAN The regulatory & input specialist	Core value chain strength Technical inputs & quality assurance	Primary constraint Chronic water scarcity & limited land	Key Takeaway Supplies high-quality seeds and certification services required for pharmaceutical-grade MAP products.

4.5 Trade, market access and labour dynamics

Regional and international trade dynamics

MAP products and raw materials are traded regionally and internationally through a combination of formal and informal channels. Demand for dried herbs, essential oils and MAP-derived inputs remains strong in regional markets and extends to Europe, the Gulf and beyond. However, access to these markets varies significantly across countries and stages of the value chain.

Syrian MAP products face substantial barriers to formal trade. Export channels are limited by regulatory constraints, documentation requirements, lack of certification and high transaction costs associated with border crossings. As a result, much of the trade involving Syrian MAPs occurs informally or through intermediary actors in neighbouring countries. While these arrangements enable continued market access, they also reduce transparency, limit price realisation for producers and constrain opportunities for quality upgrading.

Lebanon plays a critical role as a trade and marketing hub for MAP products. Lebanese traders and processors have established export relationships and familiarity with international market requirements. Through re-export, branding and further processing, Lebanese firms facilitate access to higher-value markets, including niche segments such as organic, wellness and cosmetic products. However, trade operations are increasingly affected by infrastructure bottlenecks, port congestion, energy shortages and rising logistics costs, which reduce competitiveness and increase uncertainty.

Jordan's role in MAP trade is closely linked to its regulated processing and certification capacities. Jordanian firms are better positioned to export to markets that require stringent quality and safety standards, particularly for pharmaceutical and nutraceutical products. Efficient border procedures and relatively predictable regulatory processes enhance Jordan's attractiveness as a regional processing and compliance hub, although overall trade volumes remain limited by domestic production constraints.

Border crossings and transaction costs

Border crossings between Syria, Lebanon and Jordan represent a critical friction point for regional MAP value chains. Administrative procedures, changing regulations, delays and costs affect the timely movement of perishable and quality-sensitive MAP products. For producers and small traders, these uncertainties discourage formal trade and reinforce reliance on informal channels.

High transaction costs disproportionately affect smallholder producers and small processors, limiting their ability to engage directly with regional buyers. Larger firms and intermediaries are better able to absorb risk and navigate border requirements, reinforcing asymmetries in market power along the value chain. Addressing these bottlenecks is essential for improving inclusivity and employment outcomes.

Labour dynamics and employment implications

Labour dynamics in the MAP sector are closely linked to trade patterns and regional value chain integration. The sector relies heavily on manual labour at multiple stages, including harvesting, sorting, drying and basic processing, creating employment opportunities for women, youth and low-skilled workers. Across the three countries, the sector is characterised by a small core of permanent workers alongside large numbers of seasonal and informal workers, particularly during peak harvesting and processing periods. More skilled positions are concentrated in downstream processing activities such as formulation, quality control and certification. Jordan shows a higher incidence of formal employment in regulated processing and quality assurance, while Lebanon and Syria rely more heavily on informal and seasonal labour, particularly at farm and post-harvest levels. Gender roles vary by country: in Lebanon and Syria, women are primarily engaged in post-harvest handling, sorting, packaging and cooperative-based processing, while men dominate physically demanding tasks, logistics and transport; in Jordan, women are more represented in semi-skilled and skilled roles such as formulation, packaging and marketing within MAP SMEs.

Syrian refugees in Lebanon and Jordan play a particularly important role in MAP-related activities. Many are employed in harvesting, wild collection, post-harvest handling and processing, often under informal arrangements. Through these roles, refugees have acquired valuable sector-specific skills, familiarity with quality requirements and exposure to more structured market systems.

As partial return to Syria continues, these workers represent a key conduit for transferring skills, know-how and market connections back into Syrian value chains. Returnees can contribute not only as labourers but also as lead farmers, supervisors, aggregators and small-scale entrepreneurs, strengthening production quality and reliability. At the same time, continued engagement of refugees in MAP value chains in Lebanon and Jordan supports employment and income generation in host communities.

Regional value chain integration and employment implications

The distribution of secondary processing and certification capacities across Syria, Lebanon and Jordan creates a strong case for regional integration. Syria's potential lies in rebuilding reliable supply of raw materials and retaining a growing share of processing activities domestically over time. Lebanon's strengths in branding, product development and market access can anchor demand and drive upgrading. Jordan's regulatory and certification capacities can enable access to higher-value and regulated markets.

Together, these complementary roles can support the development of integrated regional MAP value chains that generate employment across multiple segments, from labour-intensive processing to skilled technical and managerial roles. Strengthening linkages at this stage can significantly increase value retention within the region while improving resilience and inclusivity of employment outcomes.

Trade and labour mobility are central to the functioning of the medicinal and aromatic plants value chain across Syria, Lebanon and Jordan. Regional sourcing, cross-border movement of goods and workers, and access to external markets shape incentives for production, processing and investment, while directly influencing the scale and quality of employment generated along the value chain.

4.6 Country-specific strategic priorities for MAP value chain development

While regional integration is central to unlocking the full potential of the medicinal and aromatic plants (MAP) sector, constraints and comparative advantages differ significantly across Syria, Lebanon and Jordan. A coherent regional strategy therefore requires differentiated intervention priorities in each country, aligned with their respective roles within the value chain and their structural realities.

Syria: restoring production capacity and building quality foundations

In Syria, the strategic priority is to rebuild and modernise the upstream segments of the MAP value chain, particularly primary production and post-harvest handling, while progressively strengthening early-stage processing and quality assurance systems.

Syria's comparative advantage lies in its favourable agro-climatic conditions, rich biodiversity and long-standing indigenous knowledge of MAP cultivation and wild harvesting. The country retains a large base of smallholders and seasonal workers with experience in MAP production, as well as existing but underutilised processing capacity. These assets provide a strong foundation for scaling production and restoring regional supply, provided that key systemic constraints are addressed.

However, productivity and quality are constrained by unreliable access to certified seeds and specialised fertilisers, weak pest management systems, degraded post-harvest infrastructure, energy shortages and limited access to testing and certification services.

An effective intervention strategy in Syria would prioritise:

- Rehabilitating input systems through improved access to certified seeds, appropriate fertilisation regimes and safe phytosanitary products, reducing reliance on low-quality informal supply chains.
- Upgrading post-harvest infrastructure, including decentralised drying units, storage facilities and basic aggregation systems, to reduce losses and improve quality consistency.
- Strengthening quality control and traceability, including access to laboratory testing and basic certification mechanisms to enable compliance with regional market requirements.
- Supporting structured partnerships between producers and processors, including contract-based arrangements and co-investment models that align production with real market demand.
- Facilitating reintegration of returnees, particularly those with MAP harvesting and processing experience acquired in Lebanon and Jordan, into producer organisations and processing roles.

These priorities would generate employment primarily in rural production, harvesting and primary processing, while progressively enabling Syrian actors to capture greater value downstream.

Lebanon: consolidating value addition and premium market positioning

In Lebanon, the MAP sector is characterised by relatively stronger secondary processing, branding and market access capacities, but constrained production scale and high operating costs. The country's competitive edge derives from its well-established processing of premium herbal teas, essential oils and cosmetic products, its strengths in branding and packaging, and its access to diaspora and niche export markets. Lebanese processors and exporters are already integrated into higher-value segments of the value chain and possess accumulated experience in meeting quality and certification standards.

At the same time, high energy costs, fragmented supply, limited economies of scale and macroeconomic instability constrain competitiveness and investment capacity.

An intervention strategy in Lebanon would therefore focus on:

- Strengthening aggregation mechanisms to ensure consistent supply of quality raw materials from both domestic and regional sources.
- Enhancing processing efficiency and energy resilience, including investment in energy-efficient equipment and solar solutions to reduce operating costs.
- Expanding certification and compliance systems, particularly for organic, cosmetic and nutraceutical markets.

- Supporting product development and branding innovation, enabling firms to move further up the value chain and access higher-margin markets.
- Improving labour conditions and skills in processing, particularly for women and refugees employed in sorting, blending and packaging.

These interventions would reinforce Lebanon's role as a downstream value addition hub within the regional MAP ecosystem, generating skilled and semi-skilled employment in processing, quality management and marketing.

Jordan: leveraging input systems and regulated processing capacity

Jordan's MAP sector is more limited in primary production but strong in regulated processing, certification and agricultural input supply. The country benefits from structured agro-dealer networks, a functioning fertiliser and chemical manufacturing base, accredited laboratories and certification bodies, and relatively stable regulatory frameworks. Jordan also hosts pharmaceutical and nutraceutical processors that operate under stricter quality and compliance standards than are widely available elsewhere in the region.

These strengths position Jordan as a regulatory and technical anchor within the regional MAP value chain, particularly for products destined for higher-value and regulated markets.

However, limited land and water resources constrain expansion of domestic MAP cultivation, and high operational costs limit competitiveness in bulk production.

An effective intervention strategy in Jordan would prioritise:

- Strengthening advanced processing and certification services, positioning Jordan as a regional compliance and testing hub for MAP products.
- Supporting pharmaceutical and nutraceutical integration, enabling higher-value use of regionally sourced MAP raw materials.
- Enhancing climate-resilient and water-efficient production practices, where domestic cultivation is viable.
- Expanding technical advisory services and quality assurance systems, including regional service provision to Syrian and Lebanese producers and processors.
- Promoting innovation in packaging and regulated market access, particularly for export-oriented MAP products.

These priorities would reinforce Jordan's role as a standards, input and compliance anchor within integrated regional value chains, while creating skilled employment in laboratory services, processing and quality management.

4.7 Way forward: a regional pathway for MAP value chain development

The medicinal and aromatic plants sector offers a practical and commercially grounded entry point for advancing a regional strategy for job creation and inclusive economic development across Syria, Lebanon and Jordan. The analysis suggests that progress in this sector is most likely to be achieved through a phased and coordinated approach that builds on existing capacities, aligns private sector incentives and progressively upgrades value chain functions across countries.

A first priority is to strengthen primary production and early-stage processing in Syria in response to clear and existing regional demand. Processors in Lebanon, Jordan and Syria, including producers of herbal teas, essential oils, cosmetics, pharmaceuticals and nutraceutical products, currently face constraints in securing reliable, quality-assured raw materials. Lebanese firms depend on consistent supplies to sustain premium branding and export commitments, while Jordanian pharmaceutical and nutraceutical producers require traceable and standardised inputs for regulated markets. In both cases, supply volatility increases costs and undermines competitiveness.

At the same time, Syrian MAP production has contracted due to weakened input systems, degraded post-harvest infrastructure and energy constraints. Farmers are in dire need of support to improve productivity and quality through better access to seeds, fertilisers, basic equipment and technical guidance, alongside targeted investments in post-harvest handling such as drying, sorting and storage. These interventions are labour-intensive and can generate immediate employment for rural households and returnees, while addressing a critical bottleneck for downstream processors across the region.

This creates a clear opportunity for structured, mutually beneficial engagement. Supporting Lebanese, Jordanian and Syrian processors to co-invest in upstream production in Syria, through contract farming, forward purchasing commitments, embedded input provision and technical support, aligns incentives across the value chain. Processors gain secure access to competitively priced raw materials that meet their quality specifications. Syrian farmers gain predictable demand, access to inputs and technical guidance, and improved price realisation.

At the same time, closer and more structured linkages with processors and buyers in Lebanon and Jordan are essential to anchor production improvements in real market demand. Lebanese processors and exporters, with their strengths in product development, branding and access to premium markets, can act as lead firms, providing quality specifications, forward purchasing commitments and embedded services to upstream producers. Jordanian actors can complement this by supplying agricultural inputs, technical expertise and quality assurance services, particularly for products destined for regulated pharmaceutical and nutraceutical markets.

A second priority is to upgrade post-harvest handling, quality control and aggregation systems in ways that facilitate regional integration. Shared or decentralised drying and storage solutions, improved aggregation mechanisms and basic traceability systems can significantly reduce losses, improve consistency and enable Syrian producers to meet buyer requirements and reduce sourcing risks for regional processors. These investments also create employment opportunities, particularly for women, and lay the groundwork for more advanced processing over time.

Labour mobility and skills transfer are a cross-cutting element of this pathway. Syrian refugees and returnees represent a critical asset for MAP value chain development, carrying practical skills, sector knowledge and market connections acquired during displacement. Facilitating pathways for skills matching, supervised return and reintegration into MAP-related activities can accelerate upgrading while supporting sustainable livelihoods.

Taken together, these actions point to a regional MAP value chain that evolves incrementally: rebuilding production and employment in Syria, anchoring demand and value addition in Lebanon, and drawing on Jordan's strengths in inputs, certification and regulated processing. By sequencing interventions and leveraging complementarities, the MAP sector can serve as a demonstration of how regional value chain development can generate shared economic benefits, strengthen resilience and contribute to decent work outcomes across Syria, Lebanon and Jordan.



► Fruits and Vegetables (FAV)

5.1 Sector overview and regional relevance

The fruits and vegetables (FAV) sector is a cornerstone of agricultural livelihoods and food systems across Syria, Lebanon and Jordan. It is highly labour-intensive, generates employment across multiple stages of the value chain and plays a critical role in food security, rural incomes and regional trade. The sector offers strong potential for job creation at scale, particularly for smallholders, seasonal workers, refugees and returnees.

Demand for fresh and processed fruits and vegetables remains strong across domestic, regional and international markets. The three countries exhibit complementary strengths within FAV value chains. Syria possesses substantial production potential and labour availability; Lebanon contributes strengths in aggregation, packaging, branding and market access; and Jordan plays a key role in agricultural input supply, climate-smart production technologies and regulated export channels. These complementarities provide a strong basis for regional value chain development that can support inclusive employment and economic recovery across the Levant.

5.2 Agricultural inputs

Reliable access to agricultural inputs is a critical determinant of productivity, quality and competitiveness in fruits and vegetables value chains. Unlike rain-fed crops or hardy perennial systems, fruits and vegetables production is highly input-intensive and extremely sensitive to disruptions in seed supply, fertilisation regimes, phytosanitary control, irrigation and energy availability. Achieving commercially viable yields and meeting market specifications requires predictable access to high-quality inputs throughout the production cycle.

Across Syria, Lebanon and Jordan, the input ecosystem for fruits and vegetables is characterised by structural fragility, high import dependency and exposure to price volatility. Weaknesses in input supply systems translate directly into uneven yields, high post-harvest losses, quality inconsistencies and reduced market access. These challenges affect not only production outcomes but also downstream processing, trade and employment generation along the value chain.

Key input categories shaping the performance of the fruits and vegetables sector include seeds and seedlings, fertilisers, pesticides and phytosanitary chemicals, irrigation systems and energy, tools and machinery, and packaging and handling materials.

Syria

Syria's fruits and vegetables input supply system has been severely disrupted by conflict, sanctions, infrastructure destruction and currency collapse. Farmers rely overwhelmingly on informal and unregulated markets for seeds, fertilisers, pesticides and irrigation equipment, with supplies entering the country primarily through smuggling and ad hoc cross-border trade from Lebanon, Turkey and Jordan. These channels lack quality control, traceability and regulatory oversight, exposing farmers to counterfeit or contaminated inputs and undermining food safety and compliance with market standards.

Access to certified seeds is one of the most critical constraints. Potato seed, onion seed and hybrid vegetable varieties are almost entirely import-dependent, yet legal importation is severely constrained. Farmers frequently resort to recycled or low-quality seed, leading to uneven germination, increased disease pressure and reduced yields. Local seed multiplication systems have been further compromised by war-related contamination and degraded production conditions.

Fertiliser availability is similarly constrained. While Syria retains domestic capacity to produce basic nitrogen and phosphate fertilisers, these products are poorly matched to the nutrient requirements of intensive fruits and vegetables production, which depends on balanced NPK formulations, water-soluble fertilisers and micronutrients. Access to specialised fertilisers and biostimulants is extremely limited and costly.

Phytosanitary control is another major weakness. High disease pressure in fruits and vegetables production requires consistent and regulated use of insecticides, fungicides and herbicides. In Syria, unregulated agro-pharmacies and smuggled pesticides dominate the market, increasing risks of crop failure, chemical residues and rejection by processors and buyers.

Irrigation and energy constraints represent a defining challenge. Damaged irrigation infrastructure, frequent electricity outages and very high diesel prices have made pumping water prohibitively expensive in many areas. For many farmers, the cost of irrigation alone exceeds the market value of their produce, rendering fruits and vegetables production economically unviable.

Despite these constraints, Syrian farmers demonstrate strong adaptive capacity. Drip irrigation systems, intercropping and low-cost water management techniques are widely used where possible. There is also growing interest in solar-powered irrigation systems, which offer a potential pathway to reduce dependence on diesel and improve production viability if investment barriers can be addressed.

Lebanon

Lebanon's fruits and vegetables input supply system remains structurally functional but is deeply fragile. The sector is highly import-dependent, relying on European, Chinese and regional suppliers for seeds, fertilisers, pesticides and biostimulants. While high-quality inputs are available through established importers and distributors, access is constrained by extreme price volatility, the collapse of the banking sector and the shift to cash-based transactions.

Specialised suppliers and agro-dealers provide technical advisory services and support compliance with food safety and export standards, including GLOBALG.A.P. However, most farmers are unable to purchase optimal input packages due to high USD-denominated prices and lack of credit. As a result, many resort to cheaper, lower-quality alternatives sourced through smuggling networks, undermining productivity and compliance.

At the same time, Lebanon retains important strengths. Strong importer networks ensure availability of high-quality inputs, contract farming arrangements in selected value chains provide a foundation for input standardisation, and there is growing interest in climate-smart crops and drip irrigation systems aligned with long-term sector modernisation.

Jordan

Jordan's fruits and vegetables input supply system is the most structured and institutionally coherent in the region. The country benefits from domestic fertiliser manufacturing, organised agro-dealer networks, reliable logistics through the Port of Aqaba and functioning regulatory institutions. These strengths provide a relatively predictable input supply environment, particularly for larger commercial farms and processors.

Jordan produces compost, biofertilisers, basic fertilisers, packaging materials and some equipment domestically. However, high-quality seeds, advanced agrochemicals, greenhouse technologies and specialised machinery remain largely import-dependent, sourced from Europe, Turkey, Egypt and neighbouring countries. Import-related costs, customs duties and regulatory procedures increase prices for farmers and processors.

Despite strong institutional capacity, the sector faces significant constraints. Fragmented smallholder production and weak demand forecasting limit suppliers' ability to stock fruits and vegetables-specific inputs at scale. Financial constraints and reliance on deferred payment systems create liquidity stress across the value chain, affecting farmers, traders, processors and logistics firms alike. High costs of electricity, fuel, water and labour further reduce competitiveness.

Nevertheless, Jordan possesses significant strengths that support regional value chains. Its phosphate and potash industries underpin a reliable fertiliser base, its logistics and cold storage systems are advanced, and solar energy is increasingly used for irrigation and storage. Jordan's emerging contract farming models and donor-supported initiatives promoting precision agriculture, organic inputs and sustainable packaging offer scalable pathways for upgrading input systems regionally.

5.3 Primary production

Primary production is the foundation of the fruits and vegetables value chain and a major source of employment across Syria, Lebanon and Jordan. Production systems vary widely across the three countries, shaped by agro-ecological conditions, access to water and inputs, market orientation and the impact of crisis and displacement. Despite these

differences, the sector remains dominated by small- and medium-scale producers and is highly labour-intensive, offering significant employment potential for rural households, seasonal workers, refugees and returnees.

Across the three countries, access to formal markets (regional and international) is increasingly conditioned by compliance with pesticide residue limits, phytosanitary standards and food safety regulations. Widespread use of unregulated or smuggled agrochemicals poses a persistent risk of export rejection, limiting producers' ability to move beyond informal or low-value trade channels.

Syria

Syria has historically been one of the region's most important producers of fruits and vegetables, supported by a wide range of agro-ecological zones and farming systems. Key production areas include the coastal regions of Latakia and Tartous (citrus, vegetables), the Orontes basin and central plains of Hama and Homs (vegetables, potatoes), northern regions such as Aleppo and Idlib (vegetables, legumes), the north-east (vegetables and industrial crops), and southern governorates including Daraa and Sweida (vegetables, grapes, stone fruits). Production is predominantly smallholder-based, relying heavily on family labour and seasonal workers.

Despite extensive disruption, agricultural production continues in many areas. However, farmers face severe and interrelated constraints. Access to quality seeds is limited, with many producers relying on saved seed or informal markets, resulting in variable yields and quality. Fertilisers and crop protection products are scarce and costly, reflecting import constraints, supply chain disruptions and high transaction costs. Access to agricultural equipment, including tractors, harvesters and irrigation pumps, is limited by high prices, lack of spare parts and fuel shortages.

Water availability and irrigation represent critical challenges. Damage to irrigation infrastructure, rising fuel costs for pumping and increasing climate variability have reduced reliability of water supply in both irrigated and rain-fed systems. Extension services that once supported crop planning, pest management and post-harvest practices have been significantly weakened, limiting adoption of improved and climate-resilient production methods.

These constraints increase production risks, reduce productivity and lead to inconsistent quality, limiting farmers' ability to access stable markets. Nevertheless, Syria's scale of production potential, labour availability and accumulated farming knowledge position it as a central production base within regional fruits and vegetables value chains, provided that access to inputs, water management and market linkages can be progressively restored.

Lebanon

Fruits and vegetables production in Lebanon is more intensive and market-oriented but constrained by land availability and high production costs. Production is concentrated in the Bekaa Valley and Akkar, which serve as the country's main agricultural zones, as well as in parts of the south and peri-urban areas. Crops include a wide range of vegetables, citrus, apples, grapes and stone fruits, often produced for domestic consumption and export.

Lebanese producers generally have better access to irrigation, inputs and technical knowledge than their Syrian counterparts, and production systems are more closely integrated with traders and exporters. However, farms are typically small and fragmented, limiting economies of scale. Input costs are high and volatile, driven by currency depreciation, inflation and supply disruptions. Labour costs are also high, leading many producers to rely on Syrian refugee labour for harvesting and on-farm handling.

Environmental pressures are increasing. Water availability is uneven, groundwater extraction is rising, and climate variability affects yields and crop quality. Energy shortages and high fuel prices affect irrigation and agricultural production, including in greenhouses, increasing production costs and uncertainty. Despite these challenges, Lebanese producers remain responsive to market signals and capable of supplying high-value and niche markets when conditions allow.

Jordan

Jordan's fruits and vegetables production is shaped by structural environmental constraints, particularly chronic water scarcity, high temperatures and limited arable land. Production is concentrated in the Jordan Valley and selected highland areas, where controlled irrigation systems and intensive farming techniques are applied. Crops include vegetables, citrus and selected fruits, often produced for regional export markets.

To cope with environmental constraints, Jordan has developed advanced expertise in climate-smart agriculture, including drip irrigation, fertigation, greenhouse production and precision input use. Production systems are highly

managed and market-oriented, with strong linkages to exporters and logistics providers. While production volumes are smaller than in Syria, productivity per unit of land and water is relatively high.

Jordan also plays a critical role as a regional supplier of agricultural inputs and technologies. Jordanian firms produce and distribute seeds, fertilisers, irrigation equipment and greenhouse technologies used across the region. This upstream role is central to regional value chain development and offers opportunities for transferring climate-resilient practices to neighbouring countries.

5.4 Post-harvest handling and primary processing

Post-harvest handling and primary processing are among the most critical stages of the fruits and vegetables value chain, shaping product quality, losses, market access and employment outcomes. Activities such as sorting, grading, washing, cooling, storage and packing are labour-intensive and generate significant employment opportunities, particularly for women, youth and seasonal workers. Across Syria, Lebanon and Jordan, capacities and constraints at this stage differ markedly, reflecting variations in infrastructure, energy access, market integration and investment levels.

Syria

In Syria, post-harvest handling and primary processing constitute a major bottleneck in the fruits and vegetables value chain. In many production areas, fruits and vegetables are sold immediately after harvest or handled using rudimentary methods at farm or trader level. Limited access to cold storage, grading facilities and appropriate packaging materials leads to high post-harvest losses, shortened shelf life and inconsistent quality.

Cold chain infrastructure has been severely affected by conflict-related damage, energy shortages and high operating costs. Refrigeration facilities, where they exist, often operate intermittently due to unreliable electricity supply and fuel scarcity. As a result, farmers and traders are frequently forced to sell produce quickly at low prices, particularly during peak harvest periods, reducing incomes and increasing market volatility.

Primary processing activities such as washing, sorting and packing are largely manual and informal, creating employment but limiting efficiency, traceability and compliance with buyer requirements. Quality control systems are weak, and standardised grading is rarely applied, constraining access to formal domestic markets and regional trade. Packaging materials are often inadequate or reused, further affecting product presentation and marketability.

Despite these challenges, the labour-intensive nature of post-harvest handling in Syria presents clear opportunities for job creation. Targeted investments in basic, decentralised post-harvest infrastructure, such as low-cost cooling solutions, grading tables and packhouses adapted to energy-constrained environments, could significantly reduce losses, improve quality and generate employment while strengthening linkages to regional buyers.

Lebanon

Lebanon has comparatively more developed post-harvest handling and primary processing systems, particularly in export-oriented value chains. Packing houses, cold storage facilities and aggregation centres are concentrated in major production areas such as the Bekaa Valley and Akkar, supporting vegetables, apples, citrus and other fruits destined for domestic and external markets.

Lebanese post-harvest operations generally apply more standardised grading, sorting and packaging practices, enabling compliance with buyer specifications and quality standards. These facilities generate substantial employment, including for Syrian refugees, particularly in sorting, packing and logistics. Integration with traders and exporters allows for more coordinated production planning and market access.

However, Lebanon's post-harvest systems face increasing stress. Energy shortages, rising fuel prices and infrastructure degradation have significantly increased operating costs and reduced reliability. Many cold storage and packing facilities operate below capacity or rely on costly alternative energy sources. Limited access to finance constrains maintenance and upgrading, while macroeconomic instability increases uncertainty and risk.

Despite these constraints, Lebanon's post-harvest and primary processing segment remains a key regional asset. Its experience in aggregation, quality control and export-oriented handling provides a practical model for upgrading post-harvest systems elsewhere in the region.

Jordan

Jordan benefits from relatively advanced and standardised post-harvest handling systems, particularly for fruits and vegetables destined for export markets. Cold chain infrastructure, including refrigerated storage, packhouses and transport, is well developed in major production areas such as the Jordan Valley. These systems support traceability, food safety compliance and consistent quality, enabling access to regional and international markets.

Primary processing in Jordan is more capital-intensive and less labour-intensive than in Syria or Lebanon, reflecting higher levels of mechanisation and standardisation. Employment generated at this stage tends to be more formal and skilled, including roles in quality management, logistics and facility operation. Jordanian firms also provide packaging materials, cold chain services and technical expertise regionally.

Environmental constraints, particularly water scarcity and high temperatures, have driven innovation in post-harvest efficiency and loss reduction. Jordan's experience with energy-efficient cooling, improved packaging and logistics optimisation offers valuable lessons for adapting post-harvest systems in more fragile and resource-constrained contexts.

5.5 Secondary processing, packaging and value addition

Secondary processing, packaging and value addition are critical for increasing incomes, stabilising employment and enabling access to higher-value markets in the fruits and vegetables sector. Activities at this stage include washing, cutting, freezing, drying, juicing, canning, pickling, and advanced packaging, as well as branding and compliance with food safety and quality standards. Compared to primary production, these functions generate more stable and often more skilled employment, while allowing greater value retention within the region.

Capacities at this stage vary significantly across Syria, Lebanon and Jordan, creating both constraints and strong complementarities for regional value chain development.

Syria

Syria retains a base of secondary processing capacity in the fruits and vegetables sector, including facilities producing tomato paste, pickles, jams, juices, dried vegetables and fruit preserves. Prior to the conflict, agro-processing was an important source of employment and value addition, closely linked to domestic agricultural production.

Today, many processing facilities operate well below capacity or intermittently. Key constraints include irregular supply of raw materials, energy shortages, outdated or damaged equipment and limited access to working capital. Electricity supply remains unreliable, and fuel costs are high, increasing production costs and limiting continuous operations. Access to packaging materials such as jars, cans and food-grade plastics is constrained, while modern packaging technologies are largely unavailable.

Certification and compliance represent major barriers. Many Syrian processors lack access to accredited laboratories, food safety certification and internationally recognised standards, restricting their ability to access formal domestic markets and effectively excluding them from most export channels. As a result, processing is often oriented toward local markets, with limited incentives to invest in upgrading.

Despite these challenges, Syrian secondary processing offers significant potential for job creation and value retention. With improved raw material supply, energy solutions and access to basic quality assurance, existing facilities could rapidly increase utilisation, creating employment in processing, maintenance, quality control and management.

Lebanon

Lebanon plays a leading role in secondary processing, packaging and branding within the regional fruits and vegetables value chain. Lebanese firms are active in a wide range of activities, including freezing, juicing, drying, canning and production of ready-to-eat and specialty food products. Strong capabilities in packaging design, branding and marketing enable access to domestic, regional and international markets, including high-value and niche segments.

Lebanese processors generally have experience complying with food safety standards and export requirements, supported by established relationships with traders, retailers and distributors. These downstream strengths anchor demand for raw materials sourced regionally, including from Syria when conditions allow.

However, Lebanon's processing sector operates under severe macroeconomic stress. Energy shortages, high fuel prices, currency volatility and limited access to finance significantly affect operating costs and investment capacity. Many firms rely on generators or alternative energy sources, increasing production costs and reducing competitiveness. Despite these challenges, Lebanese processors continue to adapt through diversification, product upgrading and regional sourcing strategies.

Jordan

Jordan occupies a complementary position in secondary processing and value addition, particularly for products destined for regulated export markets. Jordanian firms are active in freezing, fresh-cut processing, juicing and packing of fruits and vegetables for regional and international destinations. The country benefits from relatively strong regulatory frameworks, accredited laboratories and established food safety systems.

Jordan's processing facilities tend to be more capital-intensive and standardised, generating fewer but more formal and skilled jobs compared to more labour-intensive systems elsewhere. Jordanian firms also supply packaging materials, food-grade plastics and technical services regionally, reinforcing their upstream and downstream roles within the value chain.

Environmental constraints have driven efficiency and innovation in Jordanian processing systems, including energy-efficient technologies, water recycling and waste reduction practices. These experiences are highly relevant for improving sustainability and resilience across regional value chains.

► Regional complementarities — fruits & vegetables sector

From field to market: the regional value chain for fruits & vegetables (FAV)

 SYRIA The production base	Core value chain strength Large-scale primary production across diverse agro-ecological zones	Primary constraint Disrupted input systems, high irrigation costs, and very high post-harvest losses	Key Takeaway Commands the region's largest FAV production potential, with smallholder farming and seasonal labour providing the backbone of regional supply.
 LEBANON The aggregation & export gateway	Core value chain strength Aggregation, packaging, branding and established export channels to Gulf and diaspora markets	Primary constraint High production costs, energy shortages and macroeconomic instability	Key Takeaway Transforms regional produce into market-ready goods through superior packaging and branding, with access to niche and high-value export segments.
 JORDAN The input & standards anchor	Core value chain strength Domestic fertiliser manufacturing, organised agro-dealer networks, climate-smart irrigation technology and certified export logistics	Primary constraint Chronic water scarcity and limited arable land constrain production scale	Key Takeaway Supplies the region with quality-assured inputs and irrigation expertise, while its cold chain and export compliance systems open access to Gulf and international markets.

5.6 Trade, market access and labour dynamics

Regional and international trade dynamics

Fruits and vegetables are traded extensively within the region and to external markets, including the Gulf, Iraq and, to a more limited extent, Europe. Demand for fresh produce, frozen vegetables and processed products remains strong, driven by population growth, urbanisation and seasonal supply gaps. However, the ability of producers and firms to access these markets varies significantly across countries.

Syria's participation in formal regional and international trade remains constrained. Export volumes are limited by regulatory barriers, lack of certification, high transport costs and uncertainty at border crossings. As a result, much of Syria's fruits and vegetables trade occurs through informal or semi-formal channels, often mediated by traders and processors based in neighbouring countries. While these arrangements enable continued market access, they reduce price transparency and limit incentives for producers to invest in quality upgrading.

Lebanon plays an important role as a trading, aggregation and re-export hub. Lebanese traders and exporters have established market linkages and experience navigating export requirements, particularly for Gulf markets. These capabilities allow Lebanese firms to source produce regionally and channel it into higher-value markets. However, trade operations are increasingly affected by infrastructure bottlenecks, port congestion, energy shortages and rising logistics costs, reducing competitiveness and increasing risk.

Jordan occupies a strategic position in regional produce trade due to its relatively efficient logistics, clearer regulatory frameworks and established export corridors. Jordanian exporters are well integrated into regional markets and benefit from predictable border procedures and compliance with international standards. While production volumes are constrained, Jordan's trade and logistics capabilities play a key role in regional value chains.

Across the three countries, access to European markets remains constrained by several structural barriers: strict pesticide residue limits and GLOBALG.A.P. certification requirements that most smallholders and cooperatives cannot consistently meet; high logistics costs linked to the collapse of the overland route through Syria, which has forced exporters onto maritime routes adding 25-40 days of transit time; and limited cold chain reliability, which reduces freshness and increases spoilage risk for perishable produce.

Border crossings and transaction costs

Cross-border trade in fruits and vegetables is particularly sensitive to delays and administrative barriers. Border crossings between Syria, Lebanon and Jordan are characterised by variable procedures, documentation requirements and waiting times. For perishable products, delays translate directly into quality deterioration, losses and reduced prices.

High transaction costs disproportionately affect smallholders and small traders, limiting their ability to engage directly in formal cross-border trade. Larger traders and exporters are better positioned to manage risk and navigate regulatory complexity, reinforcing concentration of market power. Improving predictability, coordination and information flows at border crossings is therefore critical for enhancing inclusivity and employment outcomes.

Labour dynamics and mobility

The fruits and vegetables sector is one of the largest employers of seasonal and migrant labour in the region. Labour demand peaks during planting, harvesting and post-harvest handling, creating significant employment opportunities for low- and semi-skilled workers. Tasks range from field activities such as planting, irrigation and harvesting to sorting, packing, processing and logistics, with larger farms and agribusinesses increasingly incorporating mechanised equipment and cold chain systems.

Employment structures across the sector combine a small number of permanent workers with large seasonal labour forces, particularly during harvest periods. While larger agribusinesses and food processing companies formalise some permanent roles, much of the field-based labour remains informal, often characterised by long working hours, limited contracts and minimal social protection. Women play a prominent role in post-harvest activities such as sorting, packing and preparation, while men are more commonly engaged in field operations and machinery use. At the same time, the sector faces shortages of skilled operators and technicians able to manage modern equipment, cooling systems and mechanised agricultural processes.

Syrian refugees form a substantial share of the agricultural workforce in both Lebanon and Jordan, particularly in harvesting, packing and processing. Over time, many have acquired practical skills in commercial farming, quality control, cold chain management and logistics. These skills enhance productivity and contribute to the functioning of export-oriented value chains.

Return dynamics are increasingly relevant. While large-scale return to Syria remains constrained, partial and gradual return is already taking place, and many refugees are considering return in the medium term. Employment prospects are a key determinant of sustainable return. Returnees with experience in commercial agriculture and post-harvest systems can play a catalytic role in revitalising Syrian production and improving quality and market integration.

At the same time, continued participation of refugees and host community workers in agricultural labour markets in Lebanon and Jordan remains important for sustaining production and trade in those countries. Balancing labour mobility, protection and skills development across borders is therefore a central consideration for regional value chain strategies.

Regional integration and upgrading potential

The distribution of processing, packaging and value addition capacities across Syria, Lebanon and Jordan highlights the benefits of a regional approach. Syria's potential lies in revitalising existing processing facilities and gradually expanding value addition as production stabilises. Lebanon's strengths in product development, branding and market access can drive demand and innovation, while Jordan's regulatory and technical capacities enable access to higher-value and regulated markets.

Strengthening linkages between these segments can support a phased upgrading pathway: anchoring early value addition and certification regionally, while progressively building processing capacity and skills in Syria. This approach reduces risk, avoids duplication of functions and maximises employment and income generation across the region.

From an employment perspective, upgrading secondary processing and packaging offers opportunities to create more stable jobs, improve working conditions and increase participation of women and youth. By aligning private sector incentives and leveraging regional complementarities, the fruits and vegetables sector can contribute meaningfully to inclusive growth and decent work across Syria, Lebanon and Jordan.

5.7 Country-specific strategic priorities for fruits and vegetables value chain development

While regional integration is central to unlocking the full potential of the fruits and vegetables sector, structural constraints and comparative advantages differ significantly across Syria, Lebanon and Jordan. A coherent regional strategy therefore requires differentiated intervention priorities in each country, aligned with their respective positions within the value chain and the specific bottlenecks affecting productivity, quality and employment.

Syria: rebuilding input systems, stabilising production and reducing post-harvest losses

In Syria, the strategic priority is to restore the functional foundations of the FAV value chain, particularly reliable access to agricultural inputs, irrigation and post-harvest handling systems, in order to stabilise production and reconnect producers to structured markets. Reducing post-harvest losses is also important from an environmental perspective: food loss at farm and post-harvest level is a significant source of methane emissions and contributes to broader climate impacts, making investments in storage and handling relevant not only for economic but also for sustainability goals.

Syria's comparative advantage lies in the scale of its production base, the diversity of its agro-ecological zones and the availability of rural labour. The country retains significant land under fruits and vegetables cultivation and a large number of experienced smallholders. However, input supply systems are fragmented and informal, irrigation costs are prohibitive due to energy constraints, and post-harvest losses are high due to weak cold chain infrastructure and limited grading and packaging capacity.

An effective intervention strategy in Syria would prioritise:

- Rehabilitating and formalising agricultural input supply systems, including access to certified seeds, balanced fertilisation regimes and regulated phytosanitary products.
- Supporting climate-resilient and energy-efficient irrigation solutions, including solar-powered pumping and rehabilitation of local irrigation infrastructure.
- Establishing decentralised post-harvest facilities such as packhouses, grading units and low-cost cold storage to reduce losses and improve quality consistency.
- Facilitating structured contract farming and aggregation models linking producers to regional processors and traders.
- Supporting returnee integration and skills upgrading in commercial farming, quality management and logistics.

These interventions would generate significant employment at farm and post-harvest levels while increasing yields, stabilising incomes and strengthening Syria's role as a production anchor within regional FAV value chains.

Lebanon: strengthening aggregation, export readiness and value-added processing

In Lebanon, the FAV sector is characterised by relatively stronger market integration, established trader and exporter networks and experience in packaging and branding. However, production is fragmented, input costs are high and macroeconomic instability constrains investment and credit availability.

Lebanon's comparative advantage lies in its aggregation capacity, packaging expertise and established export channels to regional and diaspora markets. Lebanese firms are experienced in quality compliance and can respond quickly to market demand. At the same time, small farm sizes and weak cooperatives limit economies of scale, while energy costs affect cold storage and processing operations.

An intervention strategy in Lebanon would therefore focus on:

- Strengthening producer aggregation and cooperative purchasing systems to improve bargaining power and standardise input use.
- Enhancing cold chain efficiency and energy resilience in packing houses and storage facilities.
- Supporting export compliance, quality certification and market diversification to increase value realisation.
- Promoting value-added processing such as freezing, drying and juicing to stabilise demand and reduce seasonal volatility.
- Improving labour conditions and skills in post-harvest handling and processing, particularly for women and refugee workers.

These priorities would reinforce Lebanon's role as an aggregation and export gateway within regional FAV value chains, while generating employment in processing, logistics and marketing rather than primarily in volume expansion.

Jordan: deepening input system strength and scaling structured value chains

Jordan's FAV sector operates within a comparatively structured and regulated environment. The country benefits from organised agro-dealer networks, domestic fertiliser manufacturing, reliable logistics through the Port of Aqaba and functioning regulatory institutions. While production scale is constrained by water scarcity and land limitations, Jordan has developed strong expertise in climate-smart agriculture, export compliance and quality control.

Jordan's comparative advantage lies in its institutional coherence, fertiliser production base, regulated export systems and advanced logistics and cold storage infrastructure. Larger farms and processors are able to access high-quality inputs and integrate into structured value chains.

However, fragmented smallholder production, high operational costs and liquidity constraints limit broader competitiveness.

An effective strategy in Jordan would prioritise:

- Expanding access to high-quality inputs and advisory services for smallholders through contract farming and organised procurement models.
- Promoting water-efficient and climate-resilient production systems to address long-term environmental constraints.
- Strengthening integration between input suppliers, processors and exporters to improve demand forecasting and reduce volatility.
- Expanding cold storage, packaging innovation and traceability systems to consolidate export competitiveness.
- Supporting SME processors to upgrade equipment, reduce energy costs and access new markets.

These measures would reinforce Jordan's role as a standards-driven and logistics-efficient anchor within regional FAV value chains, while generating skilled employment in processing, quality management and supply chain services.

5.8 Way forward: a regional pathway for fruits and vegetables value chain development

The fruits and vegetables sector represents a significant near-term opportunity for job creation and inclusive economic development across Syria, Lebanon and Jordan. Its labour intensity, relatively short production cycles and strong regional demand make it particularly well suited to a phased regional value chain strategy that delivers early employment gains while supporting longer-term upgrading and resilience.

This approach recognises that competition exists in certain segments, particularly in bulk production. However, in other segments, constraints in Syria and commercial pressures in Lebanon and Jordan are closely interconnected, and potentially mutually reinforcing if addressed strategically.

For Syria, a first priority is to strengthen and stabilise primary production. Syria retains significant land under fruits and vegetables cultivation and a large labour base. However, farmers are in dire need of improved access to quality seeds, fertilisers, irrigation equipment and basic machinery, alongside revitalisation of extension services and promotion of climate-resilient farming practices.

Jordanian agro-input manufacturers and distributors possess a strong fertiliser and input production base, advanced irrigation technologies and climate-smart expertise, but face limited domestic market expansion due to land and water constraints. Facilitating structured supply arrangements between Jordanian input producers and Syrian farmer groups creates a clear win-win dynamic: Jordanian firms expand their regional market base and secure stable demand, while Syrian farmers gain access to reliable, quality-assured inputs that increase productivity and consistency.

In parallel, targeted investments in post-harvest handling and primary processing are critical to reduce losses, improve quality and link producers to markets. Low-cost and decentralised solutions, such as packhouses, grading facilities and energy-efficient cooling systems, can deliver immediate gains while creating labour-intensive employment, particularly for women. These investments should be explicitly linked to market demand and quality requirements communicated by traders, processors and exporters in Lebanon and Jordan.

A second priority is to anchor upgrading through stronger regional market linkages. Lebanese and Jordanian traders, processors and exporters can act as lead firms, providing forward purchasing commitments, quality specifications and embedded services that reduce risk for producers and incentivise investment. Lebanon's strengths in aggregation, packaging and branding, combined with Jordan's expertise in regulated exports, food safety and logistics, can help open and sustain access to higher-value regional and international markets.

Downstream processing and value addition should follow a phased approach. In the short to medium term, regional capacities in Lebanon and Jordan can be leveraged for processing, packaging and certification, allowing products to access markets while Syrian processing capacity is gradually rehabilitated. Over time, selective upgrading of Syrian processing facilities can increase domestic value retention and create more stable and skilled employment, supported by regional technical expertise and market access.

Labour mobility and skills transfer are central to this pathway. Syrian refugees working in agricultural production and post-harvest handling in Lebanon and Jordan have accumulated practical knowledge of commercial farming, quality control and export requirements. Structured reintegration pathways can channel this experience back into Syrian value chains, increasing productivity and improving compliance with buyer specifications. Facilitating skills matching, supervised return and reintegration into value chains can accelerate productivity gains while supporting sustainable livelihoods. At the same time, continued employment opportunities in Lebanon and Jordan remain important for maintaining production and trade flows.

Taken together, these actions point to a regional fruits and vegetables value chain that evolves incrementally: rebuilding production and employment in Syria, anchoring demand and market access in Lebanon, and leveraging Jordan's strengths in inputs, standards and logistics. By sequencing interventions and aligning private sector incentives across borders, the sector can contribute to shared economic benefits, improved food system resilience and decent work outcomes across Syria, Lebanon and Jordan.



Syrian entrepreneur Zeinab Wazzan, a flower nectar producer in Mersin Turkey. © Fatma Cankara /ILO

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Alaa Mhairat, group leader under the Employment Intensive Investment Project (EIIP), in Mahis municipality, at the site of the project in Mahis, Jordan on June 30, 2025. © Salah Malkawi/ILO

► Construction material

6.1 Sector overview and regional relevance

The construction materials sector is a critical enabler of economic recovery, infrastructure rehabilitation and job creation across Syria, Lebanon and Jordan. Demand for construction materials is driven by a combination of reconstruction needs, housing shortages, infrastructure maintenance and ongoing private construction activity. The sector has strong multiplier effects, generating employment not only in materials production but also in transport, construction, services and maintenance.

Construction materials value chains are relatively labour-intensive, particularly in quarrying, manufacturing, transport and on-site construction, and can absorb large numbers of low- and semi-skilled workers. This makes the sector particularly relevant for employment generation for returnees, refugees, youth and other vulnerable groups. At the same time, the sector includes more skilled and formal jobs in engineering, quality control, plant operation and management.

From a regional perspective, Syria, Lebanon and Jordan exhibit strong complementarities within construction materials value chains. Syria faces massive demand linked to reconstruction and rehabilitation but has severely constrained domestic production capacity. Jordan possesses established industrial capacity for key construction materials, including cement and aggregates, supported by clearer standards and regulatory frameworks. Lebanon contributes specialised expertise in construction services, engineering and, increasingly, recycling and circular construction practices. These complementarities provide a strong foundation for a regional approach that meets immediate demand while supporting gradual rebuilding of domestic capacity in Syria.

6.2 Production of construction materials

Production of construction materials is a core component of reconstruction, infrastructure rehabilitation and housing development across Syria, Lebanon and Jordan. The sector encompasses a wide range of materials, including cement, aggregates, concrete blocks, bricks, prefabricated components and, increasingly, recycled construction materials. Production systems vary significantly across the three countries, reflecting differences in industrial capacity, energy access, regulatory environments and the impacts of conflict and economic crisis.

Syria

In Syria, domestic production of construction materials has been severely affected by more than a decade of conflict. Many cement plants, quarries, brick factories and block-making facilities have been damaged, looted or rendered inoperable. Facilities that remain operational often function at very low capacity due to unreliable electricity supply, fuel shortages, lack of spare parts and limited access to finance for rehabilitation and working capital.

Cement production is particularly constrained. Large plants that previously supplied domestic and regional markets have suffered extensive damage, while smaller grinding and block-making operations rely on imported or informally sourced inputs. Aggregate production continues in some areas through quarrying of sand and gravel, often at small or informal scale, with limited quality control and weak environmental and occupational safety practices. Brick and block production is widespread but fragmented, ranging from small family-run kilns to semi-industrial operations, with highly variable quality.

Transport costs significantly affect production economics. Damaged road infrastructure, high fuel prices and security-related constraints increase the cost of moving raw materials and finished products, limiting competitiveness and geographic reach. Regulatory uncertainty and uneven enforcement of standards further discourage investment in upgrading and formalisation.

Despite these constraints, Syria's construction materials sector holds substantial employment potential. Rehabilitation of existing facilities, even at partial scale, can generate immediate jobs in plant operation, maintenance, quarrying, transport and ancillary services. In addition, strong reconstruction demand creates incentives for gradual reinvestment, provided that risks related to energy, finance and market access can be mitigated.

Lebanon

Lebanon's construction materials production base is smaller in scale, but relatively diversified and technically capable. Domestic production includes cement, aggregates, concrete blocks, prefabricated elements and specialised materials, alongside a strong services segment linked to engineering, contracting and project management.

Lebanese producers generally operate with higher technical standards and better-quality control than many counterparts in fragile contexts. However, the sector has been deeply affected by the country's economic and financial crisis. Energy shortages, high fuel costs, currency depreciation and limited access to finance have increased production costs and reduced operating margins. Many plants operate below capacity, delay maintenance and postpone investment in upgrading or expansion.

Environmental pressures and land scarcity have shaped production practices. Quarrying is subject to regulatory constraints and public scrutiny, while waste management challenges have pushed some firms toward alternative materials and recycling-based solutions. These dynamics have fostered innovation in certain niches, including prefabrication and reuse of construction waste, but also limit large-scale expansion.

Lebanon's strength lies less in volume production and more in technical expertise, specialised materials and services. Lebanese firms are well positioned to provide engineering services, technical supervision, project management and niche production in regional construction markets, including in support of reconstruction efforts in neighbouring countries.

Jordan

Jordan plays a central role in regional construction materials production, particularly for cement, aggregates and related products. The country hosts large-scale cement plants and quarrying operations supported by relatively stable regulatory frameworks, clearer quality standards and established industrial infrastructure. Jordanian producers operate at scale and are integrated into domestic and regional supply chains.

While cement and aggregate production is capital-intensive, the sector generates significant employment in manufacturing, logistics, maintenance and quality control. Jordanian firms also supply construction equipment, materials and technical services regionally, reinforcing their upstream and downstream roles within construction value chains.

Environmental and resource constraints have driven efficiency improvements in Jordan's production systems. Energy costs, emissions regulations and water scarcity have encouraged adoption of energy-efficient technologies, alternative fuels and improved resource management. These experiences provide valuable lessons for upgrading construction materials production in more fragile contexts.

6.3 Trade, logistics and cross-border supply

Trade, logistics and cross-border supply arrangements play a central role in the construction materials value chain across Syria, Lebanon and Jordan. Given the uneven distribution of production capacity and the scale of reconstruction and rehabilitation needs, regional sourcing of construction materials is both a necessity and a strategic opportunity. Efficient logistics and predictable trade channels directly affect material costs, construction timelines and employment outcomes across the region.

Regional supply dynamics

In the current context, Syria relies heavily on regional supply of construction materials to meet immediate demand. Cross-border inflows of cement, aggregates, steel products and prefabricated components, primarily from Jordan and, to a lesser extent, Lebanon, help compensate for constrained domestic production. These flows are critical for housing repair, infrastructure rehabilitation and private construction activity.

Jordan is the most significant regional supplier of bulk construction materials, particularly cement and aggregates, supported by large-scale production capacity, relatively stable regulatory frameworks and established logistics corridors. Jordanian producers are able to supply consistent volumes and quality, making them well positioned to meet short-term demand linked to reconstruction and rehabilitation in Syria.

Lebanon's role in cross-border supply is more specialised. Lebanese firms are active in supplying prefabricated components, specialised materials and construction-related services, as well as subcontracting and project management. These activities generate employment in services, transport and logistics and complement bulk material supply from other sources.

Logistics and transport constraints

Transport and logistics represent a major cost component in construction materials value chains. Materials such as cement, aggregates and blocks are bulky and low-value relative to weight, making them highly sensitive to fuel prices, transport distances and infrastructure quality.

In Syria, damaged road networks, high fuel costs and security-related constraints increase transport times and costs, reducing affordability and limiting market reach. Storage and handling facilities are often inadequate, leading to inefficiencies and losses. These factors increase construction costs and reduce the pace of reconstruction, with knock-on effects for employment in construction and related services.

Cross-border transport faces additional challenges. Border crossings between Syria, Lebanon and Jordan are subject to administrative procedures, variable regulations and periodic delays. Documentation requirements, inspection processes and uncertainty increase transaction costs and complicate supply planning. For suppliers and contractors, these risks translate into higher prices and reduced willingness to engage in cross-border trade.

Despite these constraints, cross-border movement of construction materials continues through a combination of formal and informal arrangements. Private sector actors have developed coping mechanisms, including alternative routes, flexible sourcing and risk-sharing practices, to maintain supply.

Trade costs, standards and market structure

High trade costs and uneven enforcement of standards shape market structure within the construction materials sector. Larger firms with access to capital, transport fleets and regulatory expertise are better positioned to engage in cross-border trade, while smaller producers and traders face barriers to entry. This can reinforce market concentration and limit competition.

Differences in standards and quality requirements across countries also affect trade. Jordanian materials generally meet established quality standards and are recognised regionally, while Syrian and Lebanese products may face challenges related to certification, testing and documentation. Harmonisation of standards and mutual recognition mechanisms could reduce barriers and support more inclusive participation in regional markets.

Employment implications

Trade and logistics activities generate significant employment across the construction materials value chain. Jobs are created in transport, warehousing, handling, customs brokerage and logistics services, in addition to upstream production and downstream construction. Improvements in logistics efficiency and trade predictability can therefore have direct employment impacts.

Across the three countries, construction materials production supports a wide range of jobs, from low-skilled labour in quarrying and block-making to skilled technical roles in plant operation, engineering and quality management.

Employment in the sector is characterised by a mix of permanent technical staff and a large share of temporary or project-based workers, particularly in field construction and logistics activities. Across the three countries, many of the labour-intensive tasks in manufacturing, transport, installation and on-site construction are physically demanding and often performed by young workers or migrant labour, including refugees. While larger firms tend to provide more stable contracts and structured working conditions, small and medium enterprises frequently rely on temporary or informal arrangements, reflecting the project-driven nature of construction demand and broader regulatory constraints.

Gender participation also shows clear segmentation across the sector. Women are predominantly concentrated in administrative, financial and marketing roles, while production, logistics and on-site construction activities remain overwhelmingly male-dominated due to physical job requirements, safety considerations and prevailing social norms. At the same time, the sector faces shortages of skilled technicians, applicators and specialized production workers, highlighting the importance of targeted skills development and training to improve productivity, job quality and occupational safety.

For Syria, more reliable regional supply can accelerate reconstruction activity, stimulating demand for labour in construction, transport and services. For Lebanon and Jordan, cross-border supply supports employment in manufacturing, logistics and technical services, including for refugees and host communities.

Production upgrading potential

Production systems differ across the three countries. In Syria and Lebanon, production tends to be more labour-intensive and informal, while Jordan's systems are more capital-intensive and standardised.

From a regional perspective, the uneven distribution of production capacity creates opportunities for complementarity. In the short term, regional supply, particularly from Jordan, can help meet demand in Syria while generating employment across borders. In parallel, targeted rehabilitation and upgrading of Syrian facilities can progressively restore domestic production and increase value retention.

Upgrading pathways include improving energy efficiency, strengthening quality control, formalising production, enhancing occupational safety and integrating recycling-based materials. By leveraging regional expertise and sequencing investments, construction materials production can evolve in a way that supports reconstruction, generates employment and contributes to more sustainable and resilient economic systems across Syria, Lebanon and Jordan.

Strategic role of regional supply

From a strategic perspective, regional supply should be viewed as a transitional and complementary mechanism rather than a substitute for domestic production in Syria. In the short to medium term, regional trade is essential to meet urgent needs and stabilise markets. Over time, structured trade and supply arrangements can facilitate technology transfer, standards upgrading and co-investment, supporting gradual localisation of production and increased domestic value retention.

By improving predictability, reducing transaction costs and aligning standards, regional trade and logistics can play a catalytic role in strengthening construction materials value chains and generating employment across Syria, Lebanon and Jordan.

► Regional complementarities — Construction materials sector

Building back together: The regional value chain for construction materials

 SYRIA The reconstruction engine	Core value chain strength Massive domestic reconstruction demand; existing quarries, cement plants and block facilities; large construction labour force	Primary constraint Severely damaged production capacity; energy shortages; limited access to finance and spare parts	Key Takeaway Generates the region's largest near-term demand for construction materials, creating immediate market opportunities for regional suppliers while its own production capacity is gradually rebuilt.
 LEBANON The technical services provider	Core value chain strength Engineering expertise, project management, prefabrication and growing circular construction capabilities	Primary constraint Small production scale; high energy costs; environmental and regulatory constraints on quarrying	Key Takeaway Contributes specialised construction services, technical supervision and recycling-based solutions that complement bulk material supply from Jordan and support sustainable reconstruction.
 JORDAN The industrial supply anchor	Core value chain strength Large-scale cement and aggregates production; established quality standards; reliable logistics corridors	Primary constraint High energy costs; limited domestic demand growth; environmental pressures on production	Key Takeaway Positioned as the primary regional supplier of bulk construction materials, with surplus production capacity and established trade routes enabling it to meet Syria's reconstruction demand at scale.

6.4 Country-specific strategic priorities for construction materials value chain development

While regional integration is essential for meeting reconstruction demand and improving efficiency in the construction materials sector, structural constraints and comparative advantages differ significantly across Syria, Lebanon and Jordan. A coherent regional strategy therefore requires differentiated intervention priorities in each country, aligned with their respective positions within the value chain and their industrial and regulatory capacities.

Syria: rehabilitating production capacity and strengthening quality standards

In Syria, the strategic priority is to restore domestic production capacity in a phased and targeted manner, while improving quality control, energy reliability and environmental sustainability.

Syria's comparative advantage lies in the scale of reconstruction demand, the existence of pre-conflict industrial infrastructure and a large labour force with construction-related skills. The country retains quarries, cement plants and block-making facilities that, although damaged or underutilised, provide a foundation for rebuilding. Strong local demand for housing repair, infrastructure rehabilitation and private construction creates sustained market pull.

However, production is constrained by unreliable electricity supply, high fuel costs, damaged machinery, limited access to spare parts and finance, and weak enforcement of standards. Informal production has expanded in response to demand, but quality and safety are uneven.

An effective intervention strategy in Syria would prioritise:

- Targeted rehabilitation of viable cement plants, quarries and block factories through risk-sharing and co-investment models.
- Upgrading energy systems, including hybrid and renewable solutions, to reduce production costs and improve reliability.
- Strengthening quality control, laboratory testing and standards enforcement to improve material consistency and build market confidence.
- Formalising and modernising small-scale production clusters, including occupational safety improvements.
- Linking skills development and certification to concrete reconstruction projects to absorb labour and improve productivity.
- Exploring opportunities for recycled construction materials, drawing on Lebanese expertise in circular construction practices and the large volumes of demolition waste generated by conflict-related destruction, to reduce material costs and create additional employment streams.

These measures would generate employment across production, transport and construction services while gradually increasing domestic value retention and reducing dependence on imports.

Lebanon: leveraging technical expertise and advancing circular construction

Lebanon's construction materials sector is smaller in scale but benefits from accumulated technical expertise in engineering, project management and specialised production. The country also faces land scarcity and environmental pressure, which have driven interest in recycling and circular construction models.

Lebanon's comparative advantage lies in its specialised construction services, prefabrication capabilities and growing experience in construction waste management and recycling. Lebanese firms are well positioned to provide engineering supervision, design services and niche materials in regional markets.

However, macroeconomic instability, high energy costs and limited access to finance constrain production capacity and investment. Quarrying and cement production are subject to environmental scrutiny and regulatory constraints.

An intervention strategy in Lebanon would therefore prioritise:

- Strengthening recycling and circular construction enterprises, including production of recycled aggregates and alternative materials.
- Enhancing energy efficiency in production facilities to reduce operating costs.
- Supporting engineering and technical service firms to engage in regional reconstruction projects.

- Improving quality certification and alignment with regional standards to facilitate cross-border service provision.
- Promoting workforce upskilling in modern construction technologies and environmental compliance.

These priorities would reinforce Lebanon's role as a provider of specialised services and circular construction solutions within regional value chains, generating skilled employment and innovation-driven growth.

Jordan: consolidating industrial scale and regional supply leadership

Jordan plays a central role in regional construction materials production, particularly in cement and aggregates. The country benefits from established industrial capacity, relatively stable regulatory frameworks and clearer quality standards.

Jordan's comparative advantage lies in its large-scale cement production, organised quarrying operations, reliable logistics corridors and functioning standards and testing institutions. Jordanian producers are capable of supplying consistent volumes to domestic and regional markets, while compliance systems enhance credibility and export readiness.

Constraints include high energy costs, environmental pressures and limited domestic demand growth. Smaller firms face liquidity challenges and exposure to deferred payment systems.

An effective strategy in Jordan would prioritise:

- Strengthening export-oriented production planning linked to regional reconstruction demand.
- Enhancing energy efficiency and alternative fuel use in cement production to improve competitiveness.
- Expanding laboratory testing and certification services as regional assets.
- Supporting SMEs in upgrading equipment and improving compliance with environmental standards.
- Deepening logistics and supply chain coordination to reduce transaction costs in cross-border trade.

These interventions would consolidate Jordan's position as a regional supply anchor while generating employment in manufacturing, logistics and technical services.

6.5 Way forward: a regional pathway for construction materials development

The construction materials sector presents a unique opportunity to combine immediate reconstruction demand with medium- and long-term industrial upgrading across Syria, Lebanon and Jordan. Unlike agricultural value chains, where production cycles are seasonal, construction materials are driven by structural demand linked to housing, infrastructure and urban development. A regional strategy for this sector must therefore balance short-term supply imperatives with gradual rebuilding of domestic productive capacity in Syria.

A first priority is to ensure reliable and quality-assured supply of construction materials to meet immediate reconstruction and rehabilitation needs in Syria. In the short term, this requires structured regional supply arrangements, particularly drawing on Jordan's established cement and aggregates production capacity and Lebanon's specialised construction services and prefabrication expertise. Clear contractual frameworks, predictable trade procedures and quality alignment can reduce transaction costs and support stable cross-border flows. This approach generates employment not only in Syrian construction activity, but also in production, logistics and services in neighbouring countries.

In parallel, a second priority is the phased rehabilitation and upgrading of selected Syrian production facilities. Rather than attempting to rebuild the entire industrial base simultaneously, a targeted approach should focus on strategically located plants and quarries with viable infrastructure and market access. Risk-sharing mechanisms, co-investment models and technical partnerships with regional firms can help mitigate entry risks and facilitate technology transfer. Priority should be given to energy-efficient technologies, modern quality control systems and improved occupational safety standards to enhance competitiveness and sustainability.

A third pillar of the strategy concerns standards alignment and regulatory strengthening. Differences in quality standards, certification procedures and enforcement across countries create barriers to trade and undermine market confidence. Gradual harmonisation of technical standards and mutual recognition of testing and certification can facilitate cross-border supply and support upgrading of domestic production. Regional technical cooperation in areas such as materials testing, emissions management and quality assurance can accelerate this process.

Recycling and circular construction practices offer a further strategic opportunity. The large volumes of construction and demolition waste generated in Syria present both an environmental challenge and a potential resource base. Leveraging Lebanese and Jordanian expertise in recycling technologies and waste management can support the development of local enterprises producing recycled aggregates and alternative materials. This not only reduces environmental impact and material costs but also creates new employment streams, particularly for low- and semi-skilled workers.

Labour and skills development must be closely aligned with this investment pathway. Syrian returnees and displaced workers possess substantial construction-related experience acquired both domestically and during displacement in Lebanon and Jordan. Linking skills certification, on-the-job training and employment-intensive investment approaches to concrete reconstruction projects can accelerate labour absorption while improving job quality and safety. Regional exchange of technical expertise and certification standards can further enhance mobility and productivity.

Taken together, these actions point to a sequenced regional strategy. In the short term, regional supply ensures reconstruction momentum and stabilises employment. In the medium term, targeted co-investment and standards upgrading rebuild Syrian production capacity. In the longer term, integration of recycling, energy efficiency and improved governance supports a more sustainable and competitive construction materials ecosystem across the Levant.

By leveraging complementarities — Jordan's industrial scale and standards, Lebanon's technical services and circular practices, and Syria's reconstruction demand and labour base — the construction materials sector can become a cornerstone of regional economic integration, job creation and resilient recovery.

07

► Olive oil

7.1 Sector overview and regional relevance

Olive oil production is a cornerstone of rural economies across Syria, Lebanon and Jordan, deeply embedded in agricultural traditions, household income strategies and regional trade. Unlike fruits and vegetables, which are characterised by short production cycles and high perishability, olive cultivation is perennial and capital-intensive in establishment but relatively stable once orchards are mature. This makes the sector particularly important for long-term livelihood security, asset preservation and intergenerational income in rural areas.

Across the Levant, olive trees represent both an economic and cultural asset. Large areas of arable land in Syria, Lebanon and Jordan are dedicated to olive cultivation, often in marginal or rain-fed zones where alternative crops are limited. The sector supports employment not only in cultivation and harvesting but also in milling, oil extraction, storage, bottling, packaging and trade. Seasonal labour demand during harvesting provides important income opportunities for rural workers, including women and displaced populations. From a regional perspective, the three countries display distinct but complementary profiles within the olive oil value chain.

Syria historically has been one of the largest olive producers in the region, with major production areas in Idlib, Aleppo, Hama, Tartous and parts of the coastal and northern zones. Olive cultivation remains widespread despite conflict-related damage, and the country retains significant production potential. However, productivity, milling efficiency, quality control and export capacity have been unevenly affected by infrastructure damage, energy shortages and trade restrictions.

Lebanon produces smaller volumes but has positioned itself increasingly in higher-value and niche markets, including premium, organic and branded olive oils. Production is concentrated in the north (Akkar), Mount Lebanon and parts of the south. Lebanese firms benefit from stronger branding, packaging and diaspora market access, although high production costs and macroeconomic instability constrain competitiveness.

Jordan's olive sector is highly structured and increasingly export-oriented. Production is concentrated in the north-western highlands and central regions. Jordan has invested in modern mills, quality control systems and export compliance, enabling access to regional and international markets. While overall volumes are smaller than Syria's historical production, productivity and institutional coherence are relatively strong.

The olive oil sector differs from MAP and FAV in several important respects. It is less input-intensive and less dependent on short-term irrigation cycles, but highly sensitive to long-term orchard management, milling technology and quality preservation. Oil quality is determined not only by cultivation practices but also by harvesting methods, milling speed and storage conditions. Value addition depends heavily on certification, branding and access to premium markets.

Labour dynamics in the olive sector are also distinct. Harvesting is seasonal and labour-intensive, often relying on family labour supplemented by hired workers, predominantly under informal arrangements with no contracts, social protection or guaranteed income between seasons. In Lebanon and Jordan, Syrian refugees have been involved in harvesting and processing activities, while partial return to Syria may affect labour availability in some areas. Because olive trees are long-lived assets, decisions regarding maintenance, pruning and replanting have long-term implications for productivity and income stability.

7.2 Primary production and harvesting

Primary production in the olive oil sector is characterised by perennial orchard systems, long investment horizons and strong dependence on climatic conditions. Unlike annual crops, olive trees require sustained orchard management — including pruning, soil care and pest control — to maintain productivity and oil quality over time. Harvesting practices and timing are critical determinants of oil grade, acidity levels and market value.

Across Syria, Lebanon and Jordan, olive cultivation is predominantly smallholder-based and rain-fed, although degrees of commercialisation and technological adoption vary significantly.

Syria

Syria has historically been one of the largest olive-producing countries in the region. Major production areas include Idlib and Aleppo in the north-west, Hama and Homs in central Syria, and coastal regions such as Tartous and Latakia. Olive cultivation is widespread and deeply embedded in rural livelihoods, often representing a primary or secondary income source for smallholder households.

Production systems are largely traditional and rain-fed, although some irrigated orchards exist in higher-value zones. Many orchards consist of mature trees planted decades ago, requiring regular pruning and maintenance to sustain yields. Conflict-related disruptions have reduced access to inputs, labour and technical services, leading in some areas to neglect of orchard management, lower yields and declining tree health.

Harvesting remains highly labour-intensive and is often carried out manually using hand-picking or rudimentary mechanical shaking. Delays between harvesting and milling, caused by fuel shortages, transport constraints or limited mill access, can reduce oil quality and increase acidity levels. Access to fertilisers and pest control products has been inconsistent, affecting productivity. Olive fruit fly infestations and other pests pose recurring challenges, particularly in poorly maintained orchards.

Despite these constraints, Syria retains extensive olive-growing areas and a large base of experienced farmers. Olive trees are relatively resilient to drought compared to many annual crops, making them suitable for marginal and water-scarce areas. The scale of orchard coverage and labour availability provide a strong foundation for recovery and productivity improvements if management practices and milling efficiency can be strengthened.

Lebanon

In Lebanon, olive cultivation is concentrated in northern regions such as Akkar and the North Governorate, as well as in Mount Lebanon and parts of the South. Farms are generally small and fragmented, often located on terraced hillsides. Production is predominantly rain-fed and characterised by traditional orchard systems, though some farmers have introduced improved varieties and better management practices.

Lebanon's olive oil sector has increasingly oriented toward quality differentiation rather than volume production. Many producers aim to produce extra virgin olive oil for domestic premium markets and export to diaspora communities. Harvesting is largely manual, preserving fruit integrity and oil quality, but raising labour costs. Syrian refugee labour has been significant in harvesting activities, particularly during peak season.

However, production costs are high, driven by land fragmentation, labour expenses and limited economies of scale. Macroeconomic instability, fuel shortages and electricity constraints affect both orchard maintenance and access to mills. Climate variability — including irregular rainfall and increasing temperatures — has also affected yields and oil characteristics.

Despite these challenges, Lebanon's focus on premium quality and niche markets provides an opportunity for further upgrading, particularly through better orchard management, organic certification and branding linked to geographic origin.

Jordan

Jordan's olive production is concentrated primarily in the north-western highlands, including Irbid, Ajloun and parts of Zarqa and Balqa. Olive cultivation has expanded significantly over recent decades, supported by government programmes and investments in orchard establishment. Compared to Syria and Lebanon, Jordan's sector is more structured and supported by institutional frameworks.

While most orchards are rain-fed, supplementary irrigation is used in some areas to stabilise yields. Jordan has invested in improved varieties and orchard management practices, contributing to relatively consistent production volumes. Harvesting is a mix of manual and semi-mechanised methods, with growing adoption of mechanical shakers to reduce labour intensity and improve timeliness.

Environmental constraints are significant. Chronic water scarcity, rising temperatures and land degradation affect orchard productivity. However, olives are well suited to semi-arid conditions, and Jordan has developed expertise in water-efficient cultivation practices and extension services. Pest control and quality management are generally more structured than in neighbouring countries, supported by agricultural research institutions and regulatory oversight.

Labour demand during harvest is substantial, though increasingly affected by labour availability and wage pressures. Syrian refugees have participated in seasonal harvest labour, though regulatory and labour market dynamics influence participation levels.

7.3 Milling, extraction and primary processing

Milling and oil extraction are the pivotal stages of the olive oil value chain. The quality, grade and market value of olive oil are determined not only by orchard management and harvesting practices, but critically by the speed, hygiene and technology used during milling. Delays between harvest and pressing, poor storage of olives, outdated equipment and weak quality control can significantly increase acidity levels and reduce oil from extra virgin to lower grades, with major implications for price and export potential.

Across Syria, Lebanon and Jordan, milling infrastructure exists widely, but technology levels, efficiency, energy reliability and quality management systems differ significantly.

Syria

Syria has an extensive network of olive mills, reflecting the country's historically large production base. Milling facilities are concentrated in major olive-producing areas such as Idlib, Aleppo, Hama, Tartous and Latakia. Both traditional stone mills and more modern centrifugal systems are present, though many facilities have suffered damage, underinvestment or irregular operation due to conflict and energy shortages.

A central constraint in Syria is the timeliness and consistency of milling. Fuel shortages, electricity outages and transport difficulties often delay processing after harvest. In many areas, olives are stored for extended periods before pressing, leading to fermentation and higher acidity levels. This significantly reduces the proportion of oil qualifying as extra virgin, limiting access to higher-value markets.

Quality control systems are uneven. Many mills operate without systematic monitoring of temperature, hygiene standards or traceability. Laboratory testing for acidity, peroxide levels and other quality parameters is limited or inaccessible in some areas. As a result, oil is often sold in bulk without certified grading, reducing price transparency and market differentiation.

Nevertheless, Syria retains substantial milling capacity and experienced operators. Where modern centrifugal systems are functioning and olives are processed rapidly, oil quality can be competitive. Rehabilitation of energy supply, improved quality management and access to testing services represent major opportunities for upgrading at relatively low capital cost compared to rebuilding orchards.

Lebanon

Lebanon's olive milling sector is characterised by a mix of traditional presses and modern extraction facilities, with increasing emphasis on quality. Mills are located across major production zones, including Akkar, the North, Mount Lebanon and the South. Over recent years, many producers have invested in modern two- and three-phase centrifugal systems that improve efficiency and oil quality.

Lebanon's sector is strongly oriented toward extra virgin olive oil and premium positioning. Rapid milling after harvest is increasingly prioritised, and some producers have adopted best practices such as same-day pressing, stainless steel storage tanks and controlled temperature extraction. These practices enhance oil quality and marketability, particularly for niche export markets.

However, structural constraints remain. Energy shortages and high fuel prices affect milling operations, particularly during peak harvest season when mills must operate continuously. Smaller mills struggle to invest in upgrading equipment or maintaining hygiene standards. Fragmented orchard ownership leads to uneven olive supply volumes, making capacity utilisation unpredictable.

Despite these challenges, Lebanon's focus on quality differentiation and branding creates strong incentives for continued upgrading in milling and primary processing.

Jordan

Jordan's olive milling sector is comparatively structured and supported by clearer regulatory oversight. Modern centrifugal mills are widespread, and quality standards are more systematically applied. Government institutions and agricultural research bodies support monitoring of oil quality and grading, contributing to relatively consistent production of extra virgin olive oil.

Mills are concentrated in major olive-producing areas such as Irbid, Ajloun and the north-western highlands. Investments in modern equipment, including stainless steel storage and filtration systems, have improved oil stability and export readiness. Energy supply remains a cost factor, but more reliable infrastructure reduces operational disruption compared to neighbouring contexts.

Jordan's structured milling sector enables better traceability and compliance with export requirements. Laboratory testing and certification systems are more accessible, supporting entry into regulated regional and international markets.

However, rising operational costs, labour constraints and environmental pressures continue to affect competitiveness. Increasing mechanisation in harvesting and milling may gradually shift employment patterns toward more technical roles.

7.4 Secondary processing, bottling, packaging and branding

Secondary processing and value addition in the olive oil value chain include filtration, blending, bottling, packaging, labeling, certification and branding. While milling determines baseline oil quality, it is at this stage that market positioning, price realisation and export potential are largely defined. The capacity to differentiate products through certification, geographic identity, organic standards and brand recognition is critical for moving beyond bulk commodity markets.

Across Syria, Lebanon and Jordan, secondary processing capacity exists but differs significantly in sophistication, scale and market orientation.

Syria

In Syria, secondary processing is predominantly oriented toward bulk sales and domestic consumption. A substantial share of olive oil is sold in large containers directly from mills or through local traders, often without formal grading, filtration or branding. Bottling operations exist but are limited in scale and constrained by access to packaging materials, modern equipment and certification systems.

Packaging materials, including glass bottles, tin containers and food-grade plastics, are often imported or sourced through informal channels, raising costs and limiting consistency. Labelling and branding are generally basic, and traceability systems are weak. Access to internationally recognised certification, such as organic or geographical indication (GI) labelling, is extremely limited.

Sanctions, trade restrictions and limited laboratory infrastructure further constrain export-oriented branding and compliance. As a result, Syrian olive oil is frequently sold as bulk oil, sometimes blended or re-exported through neighbouring countries, reducing domestic value retention.

Despite these constraints, Syria's large production base offers strong potential for upgrading. Even modest improvements in filtration, bottling, labelling and basic quality certification could significantly increase price realisation and create employment in packaging, quality control and marketing.

Lebanon

Lebanon has positioned itself as a quality-oriented and brand-driven olive oil producer. Lebanese firms increasingly focus on extra virgin olive oil marketed through branded bottles targeting domestic premium consumers and diaspora markets. Smaller artisanal producers and cooperatives also engage in niche branding strategies, including organic certification and origin-based marketing linked to specific regions.

Packaging quality in Lebanon is generally higher than in neighbouring countries, with greater use of glass bottles, decorative tins and professional labelling. Some producers comply with international food safety and export standards, enabling access to higher-value regional and international markets.

However, production costs are high, and the macroeconomic crisis has constrained investment in marketing, packaging upgrades and export expansion. Access to finance is limited, and many small producers struggle to scale beyond local or diaspora-focused markets. Fragmentation of production also limits economies of scale in branding and international promotion.

Nevertheless, Lebanon's strengths in marketing, packaging and brand development make it a natural regional hub for premium positioning and downstream value addition.

Jordan

Jordan's olive oil sector has developed a relatively structured and export-oriented secondary processing segment. Bottling facilities often comply with international quality standards, and laboratory testing and certification systems are more accessible. Jordanian olive oil is marketed both domestically and internationally, with increasing emphasis on quality differentiation and compliance.

Packaging and labelling systems are generally standardised and aligned with export requirements. Jordanian producers participate in regional and international trade fairs and have established export relationships in selected markets. Certification mechanisms and institutional oversight contribute to greater transparency and consistency in grading.

At the same time, the sector faces rising costs related to energy, labour and packaging materials. Competition in bulk and premium markets requires continuous upgrading in branding, marketing and compliance.

7.5 Trade, market access and labour dynamics

Regional and international trade patterns

Olive oil from the Levant is traded both regionally and internationally, with major export destinations including the Gulf region, Europe and diaspora markets. However, the structure and sophistication of trade vary considerably across countries.

Syria has historically exported olive oil in bulk form, with significant volumes traded informally or re-exported through neighbouring countries. In the current context, formal export channels remain constrained by trade restrictions, limited access to certification, logistical barriers and weak traceability systems. As a result, a substantial share of Syrian oil is sold domestically or exported in bulk without branding or origin differentiation. This limits price realisation and reduces incentives for quality upgrading at farm and milling levels.

Lebanon's olive oil trade is more oriented toward branded and niche exports. Lebanese producers and traders leverage established relationships in diaspora markets, particularly in Europe and North America. Smaller volumes and premium positioning allow Lebanese firms to compete on quality rather than scale. However, high production costs and macroeconomic instability reduce competitiveness in bulk markets. Informal trade and cross-border blending practices also complicate transparency and origin traceability.

Jordan's olive oil sector is comparatively structured and export-oriented, supported by clearer grading standards, accessible laboratory testing and more predictable regulatory systems. Jordanian oil is marketed regionally and internationally, with efforts to promote quality recognition and standardisation. Export volumes fluctuate depending on harvest size and global price conditions, but institutional coherence provides greater market predictability than in neighbouring contexts.

Bulk markets versus premium differentiation

Across the region, olive oil producers face a strategic tension between competing in bulk commodity markets and pursuing premium differentiation. Bulk markets are price-sensitive and dominated by larger producing countries, making competition challenging. Premium markets, by contrast, require consistent quality, certification, traceability and branding, areas where capacity varies across Syria, Lebanon and Jordan.

Syria's current position is heavily weighted toward bulk and domestic markets, limiting income potential. Lebanon's strategy focuses on differentiation, geographic identity and niche exports. Jordan occupies an intermediate position, combining structured export systems with efforts to improve branding and quality recognition. Strengthening traceability, certification and geographic indication mechanisms could enhance regional competitiveness and support better price realisation, particularly in premium segments.

Border crossings and trade barriers

Cross-border trade in olive oil is influenced by regulatory requirements, customs procedures and transport costs. Although olive oil is less time-sensitive than fresh produce, delays and documentation barriers still increase transaction costs and reduce competitiveness.

For Syria, administrative barriers and trade restrictions significantly limit formal export potential. Informal trade channels persist, but these reduce transparency and weaken incentives for quality differentiation. Lebanon and Jordan benefit from more predictable trade procedures, though high logistics costs and port congestion affect export efficiency. Improved coordination of standards, mutual recognition of quality testing and clearer trade procedures could facilitate regional integration and reduce reliance on informal channels.

Labour dynamics and seasonal employment

Olive cultivation and harvesting are labour-intensive, particularly during the harvest season. Employment peaks during picking, transport and milling, providing income opportunities for rural households and seasonal workers. In Lebanon and Jordan, Syrian refugees have played a significant role in harvest labour and processing activities. Over time, this has contributed to skills accumulation in orchard management, harvesting techniques and quality preservation. As partial return to Syria occurs, labour availability may shift, with implications for both Syrian and host-country producers. Mechanisation trends, particularly the use of mechanical shakers and improved milling systems, may gradually reduce labour intensity in some segments. However, upgrading in bottling, packaging, quality control and marketing creates alternative employment opportunities requiring higher skill levels.

Across the three countries, the olive sector combines a small core of permanent staff with a larger seasonal workforce. Syria's employment is highly informal and seasonal, dominated by men in physically demanding harvesting and machinery tasks, and women in post-harvest sorting and basic packaging. In Lebanon, seasonal labour is largely provided by Syrian refugees, while small permanent teams manage technical and quality assurance tasks. Jordan features a more formal structure, with permanent staff in technical, administrative, and quality-assurance roles, while seasonal labour, mostly women and refugees, is concentrated in harvesting and basic processing.

Gender, skill, and task segmentation shape employment patterns across the region. Unskilled labour — harvesting, sorting, and cleaning — is largely performed by women, youth, and refugees; semi-skilled roles include milling, filtration, and packaging; and skilled positions cover quality control, laboratory testing, machinery maintenance, and export compliance. Targeted investments in training, quality management, and packaging can expand formal, higher-skilled employment, improve working conditions, and enable the olive sector to move toward higher-value and premium market positioning regionally.

Regional complementarities and upgrading potential

The distribution of secondary processing and branding capacities across the three countries creates opportunities for regional integration and phased upgrading. In the short term, Lebanon and Jordan's stronger branding, packaging and certification capacities can facilitate market access for regionally sourced oil, particularly where bulk oil from Syria can be processed, bottled or marketed through established channels. This arrangement, if structured transparently and equitably, can stabilise demand and support price realisation.

In parallel, gradual upgrading of bottling and branding capacity in Syria can increase domestic value retention and create employment in packaging, labeling, quality control and marketing. Investments in laboratory services, traceability systems and geographic indication schemes can support this transition.

From an employment perspective, value addition at this stage generates more stable and skilled jobs than primary production alone. Roles in bottling, packaging design, quality testing, compliance management and marketing can provide opportunities for youth, women and technically trained workers.

Ultimately, strengthening secondary processing and branding is central to moving the olive oil sector away from bulk commodity dependence toward differentiated, higher-value market positioning. Leveraging regional complementarities while building domestic capacity offers a pragmatic pathway to achieving this shift across Syria, Lebanon and Jordan.

7.6 Country-specific strategic priorities for olive oil value chain development

Structural conditions, production profiles and market positioning differ significantly across Syria, Lebanon and Jordan. A coherent regional strategy therefore requires differentiated intervention priorities in each country, tailored to their comparative advantages and binding constraints.

Syria: restoring quality, stabilising production and increasing value retention

In Syria, the strategic priority is to stabilise primary production and significantly upgrade milling quality in order to increase the share of oil meeting extra virgin standards and improve domestic value retention.

Syria's comparative advantage lies in the scale of its olive orchard base, its long-standing cultivation traditions and the resilience of olive trees in rain-fed and marginal environments. Large production areas in Idlib, Aleppo, Hama and the coastal regions provide substantial volume potential. The country also retains an extensive milling network and a large rural labour force with experience in harvesting and oil extraction.

However, orchard neglect, inconsistent pest management, delayed harvesting and irregular milling, often linked to fuel shortages and unreliable electricity, reduce oil quality. A substantial share of oil is sold in bulk without certification or branding, limiting price realisation and export potential.

An effective intervention strategy in Syria would prioritise:

- Improving orchard management through training in pruning, fertilisation and integrated pest management to restore productivity and tree health.
- Promoting timely harvesting and reducing delays between picking and milling to improve oil quality.
- Upgrading selected mills with improved hygiene standards, stainless steel storage and energy solutions to increase the proportion of extra virgin oil.
- Expanding access to laboratory testing and basic quality certification to enable grading transparency.
- Supporting small-scale bottling and packaging capacity to increase domestic value addition.
- Facilitating reintegration of returnees with experience in harvesting, milling and quality management.

These measures would increase rural incomes, generate seasonal and semi-skilled employment and gradually shift the sector from bulk commodity orientation toward higher-value positioning.

Lebanon: consolidating premium positioning and expanding branded exports

Lebanon's olive oil sector is characterised by smaller production volumes but stronger orientation toward premium markets, branding and differentiation. The country's comparative advantage lies in its focus on high-quality extra virgin olive oil, its established branding and packaging capabilities and its access to diaspora and niche export markets. Lebanese producers increasingly position their oil around origin identity, artisanal production and, in some cases, organic certification.

However, production costs are high due to fragmented landholdings, labour expenses and macroeconomic instability. Energy shortages affect milling and bottling operations, and limited economies of scale constrain competitiveness in bulk markets.

An intervention strategy in Lebanon would therefore focus on:

- Strengthening aggregation and cooperative models to improve consistency of supply and reduce per-unit processing costs.
- Expanding organic certification, geographic indication schemes and quality labeling to reinforce premium positioning.
- Supporting branding innovation, market diversification and participation in international trade platforms.
- Improving energy efficiency in milling and bottling facilities, including solar solutions.
- Upgrading labour skills in quality management, packaging and marketing.

These priorities would reinforce Lebanon's role as a premium and brand-driven node within regional olive oil value chains, generating more stable employment in processing, packaging and export-oriented activities.

Jordan: strengthening structured production and export competitiveness

Jordan's olive oil sector operates within a comparatively structured and regulated environment. The country's comparative advantage lies in its organised milling systems, accessible laboratory testing, clearer grading standards and established export channels. Investments in modern centrifugal mills and quality control have enabled relatively consistent production of extra virgin olive oil.

Production is concentrated in the north-western highlands, and while volumes are smaller than Syria's historical production, institutional coherence and regulatory oversight enhance market predictability. Environmental constraints, particularly water scarcity and climate stress, shape orchard management practices and limit expansion potential.

An effective strategy in Jordan would prioritise:

- Enhancing yield and water efficiency through improved orchard management and climate-resilient practices.
- Strengthening branding and export promotion to consolidate international market recognition.
- Expanding laboratory and certification services to serve both domestic and regional producers.
- Supporting SMEs in upgrading bottling, packaging and traceability systems.
- Promoting sustainability and environmentally efficient milling technologies.

These measures would reinforce Jordan's role as a standards-driven and export-oriented anchor within regional olive oil value chains, while generating skilled employment in quality control, certification and logistics.

7.7 Way forward: a regional pathway for olive oil value chain upgrading

The olive oil sector differs somewhat from the other sectors analysed in this report in that all three countries, Syria, Lebanon and Jordan, are producers competing in overlapping regional and international markets. Unlike medicinal and aromatic plants or fruits and vegetables, where clear complementarities exist between upstream and downstream functions, olive oil value chains are more directly competitive, particularly in bulk and mid-range segments.

In practice, regional trade in olive oil is shaped not only by market forces but also by protectionist concerns. Lebanese and Jordanian producers face domestic pressure to shield their markets from lower-priced Syrian imports, and regulatory barriers often reflect these concerns. As a result, cross-border trade frequently takes place informally, including through smuggling and blending practices that reduce transparency and undermine price differentiation. These dynamics limit the scope for straightforward regional integration strategies.

Knowledge exchange and technical advisory services, for example in modern orchard management, pest control, milling efficiency and certification procedures, represent more realistic avenues for regional collaboration than large-scale trade integration. These forms of cooperation can support upgrading in Syria without destabilising domestic markets in Lebanon and Jordan. In this context, the olive oil sector should be viewed as a case where regional complementarity is narrower and more technical in nature. The principal opportunity lies in raising productivity and quality within each country, especially in Syria, while selectively leveraging regional expertise where commercially viable and politically acceptable.

For Syria, a first priority is to stabilise and improve orchard management and harvesting practices, particularly in Syria where productivity and tree health have been affected by years of disruption. Strengthening access to appropriate fertilisation, pest control and pruning services, alongside improved harvesting techniques and reduced delays before milling, can significantly enhance oil quality without requiring large-scale replanting. These improvements directly increase price realisation and rural incomes while preserving long-lived orchard assets.

In parallel, upgrading milling and primary processing systems represents one of the most immediate and cost-effective pathways to improved competitiveness. Investments in energy reliability, improved hygiene standards, stainless steel storage and access to laboratory testing can increase the share of oil qualifying as extra virgin, with immediate price benefits. Given Syria's extensive but unevenly modernised milling network, targeted rehabilitation and quality management improvements can yield rapid gains. Lebanon and Jordan's stronger testing and regulatory systems can provide regional technical support and knowledge transfer.

A second pillar of the strategy concerns value addition, branding and certification. Moving beyond bulk oil trade is critical for increasing value retention within the region. Lebanon's experience in premium positioning, diaspora marketing and organic certification provides a foundation for regional differentiation strategies. Jordan's structured grading and export systems offer a model for compliance and traceability. Strengthening bottling, labeling and certification capacity in Syria, supported by regional laboratory services and standards alignment, can gradually shift a greater share of production toward branded and certified markets.

Labour and skills development should be integrated into this pathway. Harvesting and milling remain labour-intensive, providing seasonal employment in rural areas. At the same time, upgrading in bottling, packaging, quality control and marketing creates more stable and skilled employment opportunities. Facilitating skills transfer, including from refugees and returnees with experience in milling and processing, can strengthen sector resilience and productivity.

Finally, geographic identity and sustainability offer long-term strategic potential. Development of geographical indications, promotion of traditional varieties and expansion of organic or climate-resilient production systems can enhance differentiation in competitive international markets. These approaches align with the sector's cultural significance and rural livelihood function, while supporting higher value capture.



Syrian farmers ride a tractor. © ILO/Apex Image

► Conclusion: Toward a regional strategy for job-rich value chain development

This report set out to identify sectors and value chains with strong potential to generate employment and income across Syria, Lebanon and Jordan, and to assess how regional complementarities can be leveraged to support inclusive economic development. The analysis confirms that a regional value chain approach is not only desirable but necessary in the current context.

The economies of the Levant are deeply interconnected. Production systems, labour markets, trade flows and private sector networks extend across borders, even where formal policy frameworks are fragmented. Years of conflict, displacement and macroeconomic instability have weakened productive capacity and increased vulnerability in all three countries. At the same time, these shocks have created new patterns of regional interdependence, including labour mobility, informal trade linkages and shared input and processing systems. Harnessing these dynamics constructively offers a pathway to job creation that builds on existing realities rather than attempting to recreate isolated national value chains.

Across the four sectors analysed, medicinal and aromatic plants, fruits and vegetables, construction materials and olive oil, a consistent pattern emerges. Upstream production potential remains strong, particularly in Syria, but is constrained by weak input systems, post-harvest infrastructure, energy costs and limited access to certification and finance. Lebanon and Jordan, while facing their own macroeconomic pressures, retain stronger capacities in aggregation, processing, branding, regulated trade and logistics. Quality standards, traceability and energy reliability repeatedly emerge as decisive factors for value retention and market access. At the same time, labour mobility, particularly the experience and skills accumulated by Syrian refugees in neighbouring countries, represents a significant, and often underutilised, regional asset.

Importantly, regional cooperation already exists in practice, but it is frequently informal, ad hoc and constrained by policy-level concerns over competition and market displacement. Governments and private actors often perceive cross-border trade as a zero-sum dynamic: increased imports from one country are seen as a threat to domestic producers in another. Trade restrictions, licensing barriers and regulatory fragmentation reflect these concerns. While competitive tensions undoubtedly exist in certain segments, particularly in bulk commodities and low-margin markets, the analysis in this report demonstrates that there are substantial areas of complementarity where cooperation can generate mutual gains.

The sectors examined illustrate this clearly. In medicinal and aromatic plants, Syria's agro-climatic advantages and labour-intensive production potential can supply raw materials to Lebanese processors specialising in premium herbal products and to Jordanian pharmaceutical manufacturers requiring certified inputs. In fruits and vegetables, strengthening input systems and post-harvest handling in Syria can stabilise supply, while Lebanese aggregation and branding capacities and Jordanian export logistics can anchor access to higher-value markets. In construction materials, Jordan's industrial-scale cement production and Lebanon's engineering and recycling expertise can meet Syria's reconstruction demand in the short term, while phased rehabilitation of Syrian plants restores domestic capacity over time. In olive oil, improvements in orchard management and milling quality in Syria can increase volumes of extra virgin oil, while Lebanon's premium branding strategies and Jordan's structured certification systems enhance regional market positioning.

These complementarities suggest that regional integration does not require uniformity or duplication of capacities. Rather, it involves aligning differentiated strengths within a coordinated framework. When production expansion in one country is linked to value addition, certification or logistics in another, employment is generated at multiple stages and in multiple locations. Farmers in Syria benefit from stable demand; processors in Lebanon secure reliable supply; laboratories and exporters in Jordan expand service provision. Instead of displacing domestic production, structured cooperation can reduce volatility, improve quality and expand total market size.

Strengthening such mutually beneficial linkages enhances economic resilience in several ways. First, it diversifies risk across markets and geographies, reducing exposure to local shocks in any one country. Second, it improves efficiency by allowing value chain functions to develop where comparative advantages are strongest, rather than forcing self-sufficiency in every segment. Third, it encourages upgrading through shared standards, technology transfer and quality alignment. Fourth, it expands employment opportunities across skill levels, from labour-intensive harvesting and construction work to skilled roles in processing, certification, logistics and marketing.

A regional strategy for value chain development across Syria, Lebanon and Jordan is therefore not merely an economic efficiency argument; it is a resilience and employment strategy. By leveraging complementarities rather than reinforcing fragmentation, the three countries can strengthen productive systems, increase value retention and generate decent work opportunities across borders. The sectors identified in this report provide practical and actionable entry points for such an approach.

Across the four sectors, six cross-cutting priorities emerge as the most immediate and commercially grounded entry points for intervention:

01



Formalising input supply linkages between Jordan and Syrian producers, particularly in fertilisers, seeds and water-efficient irrigation technologies, offers a clear win-win: Jordanian suppliers gain a regional market base while Syrian producers access reliable, quality-assured inputs.

02



Investing in post-harvest infrastructure and quality systems in Syria is the single most critical bottleneck across MAP, FAV and olive oil value chains, where high losses and weak storage consistently prevent Syrian producers from meeting buyer requirements. Targeted, energy-adapted investments at this stage would generate immediate employment while unlocking supply for regional processors.

03



Structuring Jordan's certification and compliance capacities as a regional service, through accredited laboratory access, shared standards mechanisms and export facilitation, can enable Syrian and Lebanese products to reach formal markets that would otherwise remain inaccessible.

04



Building structured pathways for skills transfer and reintegration of Syrian refugees and returnees is both economically significant and practically urgent: across all sectors, this mobile workforce carries technical knowledge that, if channelled effectively, can accelerate recovery in Syrian value chains.

05



Supporting targeted regulatory cooperation in specific technical areas, including mutual recognition of quality testing, phytosanitary certification and input standards, to reduce transaction costs and friction in cross-border value chain linkages, creating a more enabling environment for the structured regional cooperation this report advocates.

06



Leveraging regional supply and technical expertise for Syrian reconstruction, in the construction materials sector, Jordan's industrial-scale cement and aggregates production and Lebanon's engineering services and circular construction expertise offer an immediate supply solution for Syria's reconstruction needs, while creating employment across borders and laying the groundwork for gradual rehabilitation of Syrian domestic production capacity.

With coordinated, sequenced and market-driven interventions built around these priorities, the value chains identified in this report can contribute to a more integrated, employment-rich and economically resilient across Syria, Lebanon and Jordan. The strategic directions outlined here were developed based on conditions at the time of fieldwork. The region continues to evolve rapidly, and any intervention strategy will need to remain adaptive, conflict-sensitive and grounded in the realities on the ground at the time of implementation.

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