

PROPOSAL FOR WINE PRODUCTION IN JOUN

To become a leading Wine producer in Lebanon, promoting local agriculture and providing health products to the community.



Contents

Acknowledgments	5
الشكر والتقدير	6
Preface	8
Proposal for Wine Production in Joun	10
Lebanon Wine Country	11
The Influence of France	11
Global Wine Market Overview	11
Market Segmentation	12
Key Market Trends	13
Global Wine Market by Region	14
Competitive Landscape	15
Lebanon Wine Market Overview	16
Market Size and Growth	16
Key Trends in the Lebanese Wine Market	16
Challenges Facing the Lebanese Wine Industry	18
Major Players in the Lebanese Wine Market	18
Outlook for the Lebanese Wine Market	19
Wine Regions in Lebanon	20
1. Bekaa Valley	20
2. Batroun	20
3. Mount Lebanon	20
4. North Lebanon	21
5. South Lebanon	21
About Mount Lebanon	21
The Chouf Region	22
Wine tourism in Lebanon	23
Business Plan for a Winery in Joun, Lebanon:	24
Introducing "Joun Vineyards"	24
Products and Services	26
Market Analysis	27
Challenges Affecting Wineries in lebanon	29
Opportunities Despite the Challenges	32

Positive Impacts On the Town's Economic Develop	oment33
1. Job Creation and Employment Opportunities .	33
2. Development of Local Infrastructure	33
3. Promotion of Local Tourism	33
4. Stimulation of Local Businesses and Entreprene	eurship34
5. Increased Export Opportunities	34
6. Economic Diversification	34
7. Training and Skill Development	34
8. Increased Government and Private Investmen	nt35
9. Environmental and Sustainable Development	35
The Winemaking Process	35
Site Layout	37
1. Key Sections of the Winery Layout	39
2. Flow and Access	4C
3. Zoning and Sustainability	40
4. Basic Site Layout Profile	40
More Considerations:	44
Ensuring High Quality and Obtaining Certifications	45
1. Quality Control	45
2. Certification Programs	45
3. Sustainable Practices	46
4. Marketing and Labeling	46
5. Continuous Improvement	46
International Donors and Grants Organizations	46
CONCLUSION:	48
Positive Impact of establishment of growth of indus	
1. Job Creation and Employment Opportunities.	
2. Development of Local Infrastructure	
3. Promotion of Local Tourism	
4. Stimulation of Local Businesses and Entreprene	
5. Increased Export Opportunities	
6 Economic Diversification	AC

	7. Training and Skill Development	49
	8. Increased Government and Private Investment	50
	9. Environmental and Sustainable Development	50
ΑP	PENDIX	55
BIB	LIOGRAPHY	60
ENI	D OF THE DOCUMENT	61

Acknowledgments

This collection of proposals is the result of a shared vision and a collaborative journey, guided by the input, dedication, and insights of countless individuals who hold Joun close to their hearts. It would not have been possible without the unwavering support and contributions of community members, experts, stakeholders, and local leaders, each of whom brought their unique perspectives to the table.

First and foremost, I extend my heartfelt gratitude to the residents of Joun, whose voices, ideas, and aspirations have been the foundation of this work. Your willingness to share your thoughts and dreams for our town has been invaluable in shaping proposals that truly reflect our community's spirit and goals. Your participation in discussions, surveys, and community gatherings has been a testament to your commitment to Joun's future.

Special thanks to all whose contributions were instrumental in refining our vision.

To the local leaders and stakeholders who championed this project, your support has been a vital source of encouragement. Your leadership and understanding of Joun's unique challenges and opportunities have given depth to these proposals, grounding them in both our town's history and its potential for growth.

Finally, I would like to thank everyone who worked behind the scenes—whether gathering data, conducting research, or organizing meetings—your efforts have been crucial in bringing this work to life.

Together, we have created a roadmap for Joun's future that honors our heritage and inspires a brighter tomorrow. I am truly grateful to each of you for your contributions, enthusiasm, and dedication to this endeavor.

With sincere appreciation,

Dr Antoine J. Burkush, PhD

الشكر والتقدير

هذه المجموعة من المقترحات هي نتيجة رؤية مشتركة ورحلة تعاونية ، تسترشد بمدخلات وتفاني ورؤى عدد لا يحصى من الأفراد الذين يحملون جون قريبا من قلوبهم. لم يكن ذلك ممكنا بدون الدعم والمساهمات الثابتة من أعضاء المجتمع والخبراء وأصحاب المصلحة والقادة المحليين ، الذين قدم كل منهم وجهات نظره الفريدة إلى الطاولة.

أولا وقبل كل شيء، أعرب عن خالص امتناني لسكان جون، الذين كانت أصواتهم وأفكارهم وتطلعاتهم أساس هذا العمل لقد كان استعدادك لمشاركة أفكارك وأحلامك لمدينتنا لا يقدر بثمن في تشكيل المقترحات التي تعكس حقا روح مجتمعنا وأهدافه. كانت مشاركتك في المناقشات والاستطلاعات والتجمعات المجتمعية شهادة على التزامك بمستقبل جون.

شكر خاص للذين كانت مساهماتهم مفيدة في صقل رؤيتنا.

إلى القادة المحليين وأصحاب المصلحة الذين دافعوا عن هذا المشروع ، كان دعمكم مصدرا حيويا للتشجيع. لقد أعطت قيادتك وفهمك لتحديات وفرص جون الفريدة عمقا لهذه المقترحات ، مما جعلها راسخة في كل من تاريخ مدينتنا وإمكاناتها للنمو.

أخيرا ، أود أن أشكر كل من عمل وراء الكواليس - سواء في جمع البيانات أو إجراء البحوث أو تنظيم الاجتماعات - كانت جهودك حاسمة في إحياء هذا العمل.

معا، أنشأنا خارطة طريق لمستقبل جون تكرم تراثنا وتلهم غدا أكثر إشراقا. أنا ممتن حقا لكل واحد منكم على مساهماتكم وحماسكم وتفانيكم في هذا المسعى.

مع خالص التقدير،

د. انطوان جان البرخش



مشاريع مبادرات شخصية "من أجل الصالح العام"

Joun Development Projects

"Pro Bono Publico"

Dr Antoine J. Burkush, PhD

رؤية واحدة، هوية واحدة، مجتمع واحد

Preface

In a world where rapid change is the new normal, the importance of strategic, sustainable, and community-centered development is paramount. Joun, with its rich cultural heritage, natural beauty, and resilient community, stands at a crossroads—one that presents both challenges and extraordinary opportunities. As we look toward Joun's future, it is essential that our plans honor the town's heritage, respond to today's needs, and set a course for future generations to thrive.

This series of proposals is the result of a deeply collaborative effort to envision Joun's path forward. Each plan reflects input from residents, local stakeholders, and community leaders, resulting in a shared vision that is both ambitious and respectful of our town's unique identity. These proposals encompass a comprehensive range of initiatives, from infrastructure and economic development to cultural preservation and environmental stewardship, with each component tailored to address Joun's specific strengths, challenges, and aspirations.

Our proposals emphasize a commitment to public infrastructure improvements, economic empowerment, environmental sustainability, and cultural continuity. From plans to enhance recreational facilities and community services to initiatives for sustainable tourism and green energy, each proposal aims to make Joun a model of progressive yet grounded development. The ultimate goal is to create a vibrant, inclusive, and resilient community—one that embodies the values, dreams, and talents of its people.

I extend my heartfelt gratitude to everyone who has contributed to this vision. Your dedication, ideas, and insight have been invaluable, illuminating the pathway to a future that aligns with Joun's core values while embracing growth and innovation. These proposals are an invitation to all residents of Joun to imagine, participate, and help build a community that harmonizes tradition with the possibilities of tomorrow.

As you review this collection, I encourage you to see not just plans, but a vision for what Joun can become. Let us move forward together, translating these ideas into action, and creating a brighter, thriving, and unified future for Joun.

With deep respect and optimism,

Dr Antoine J. Burkush, PhD

مقدمة

في عالم حيث التغيير السريع هو الوضع الطبيعي الجديد ، فإن أهمية التنمية الاستراتيجية والمستدامة التي تركز على المجتمع أمر بالغ الأهمية. تقف جون ، بتراثها الثقافي الغني وجمالها الطبيعي ومجتمعها المرن ، على مفترق طرق - مفترق طرق يمثل تحديات وفرصا غير عادية. بينما نتطلع إلى مستقبل جون ، من الضروري أن تكرم خططنا تراث المدينة ، وتستجيب لاحتياجات اليوم ، وتضع مسارا للأجيال القادمة لتزدهر.

هذه السلسلة من المقترحات هي نتيجة جهد تعاوني عميق لتصور مسار جون إلى الأمام. تعكس كل خطة مدخلات من السكان وأصحاب المصلحة المحليين وقادة المجتمع ، مما يؤدي إلى رؤية مشتركة طموحة وتحترم الهوية الفريدة لمدينتنا. تشمل هذه المقترحات مجموعة شاملة من المبادرات ، من البنية التحتية والتنمية الاقتصادية إلى الحفاظ على الثقافة والإشراف البيئي ، مع تصميم كل مكون لمعالجة نقاط القوة والتحديات والتطلعات المحددة لجون.

تؤكد مقترحاتنا على الالتزام بتحسين البنية التحتية العامة ، والتمكين الاقتصادي ، والاستدامة البيئية ، والاستمرارية الثقافية. من خطط تعزيز المرافق الترفيهية والخدمات المجتمعية إلى مبادرات السياحة المستدامة والطاقة الخضراء ، يهدف كل اقتراح إلى جعل جون نموذجا للتنمية التقدمية والمرتكزة. الهدف النهائي هو إنشاء مجتمع نابض بالحياة وشامل ومرن - مجتمع يجسد قيم وأحلام ومواهب شعبه.

وأعرب عن خالص امتناني لكل من ساهم في هذه الرؤية. لقد كان تفانيك وأفكارك ورؤيتك لا تقدر بثمن ، مما يضيء الطريق إلى مستقبل يتماشى مع القيم الأساسية لجون مع احتضان النمو والابتكار. هذه المقترحات هي دعوة لجميع سكان جون للتخيل والمشاركة والمساعدة في بناء مجتمع ينسق التقاليد مع المكانيات الغد.

أثناء مراجعتك لهذه المجموعة ، أشجعك على رؤية ليس فقط الخطط ، ولكن رؤية لما يمكن أن يصبح عليه جون. دعونا نمضي قدما معا، ونترجم هذه الأفكار إلى أفعال، ونخلق مستقبلا أكثر إشراقا وازدهارا وموحدا لجون.

مع الاحترام العميق والتفاؤل،

د. انطوان جان البرخش

Proposal for Wine Production in Joun

Lebanon Wine Country

Lebanon wine country is one of the oldest wine-growing regions in the world as excavations have shown that Lebanese wine was grown in Byblos 5,000 years ago. However, modern viticulture in Lebanon is still very young. 150 years ago, Jesuits founded the first large wineries.

Then as now, viticulture in Lebanon wine country is concentrated in the Bekaa Valley and Batroun wine regions. This high plateau between the Lebanon Mountains and the range of Anti-Lebanon on the border with Syria is the country's fruit and vegetable chamber. It is around 120 km long and between 8 and 12 km wide. Olives and wine are also grown there. Despite its proximity to the sea, the climate is not Mediterranean, but continental with hot, dry summers and cold, snowy winters. The vines grow here at a height of up to 900 meters. This height brings coolness and freshness. Besides, the altitude also brings big day-night temperature differences, which increases complexity. The harvest in Lebanon usually only takes place in mid-September.

The Influence of France

The French influence can be seen in a vineyard area of 140,000 hectares. After all, the country was under French colonial rule for a long time. Cabernet Sauvignon, Merlot, Cinsaut, Mourvèdre, Syrah, Grenache, as well as the white varieties Chardonnay, Ugni Blanc, and the fresh Sauvignon Blanc dominate. But there is as well excellent white wine from autochthonous grape varieties such as Merweh and Meroué. Lebanon wine country achieved international fame primarily through the red wines of the famous Château Musar. Château Musar has been making extremely long-lasting world-class in white and red for generations. The wines of this château are internationally famous and are a blend of Cabernet Sauvignon, Cinsaut, and Carignan. Some vintages are here up to 30 years before they are released for sale.

Global Wine Market Overview

The global wine market is a mature and highly competitive industry that has been experiencing steady growth over the past decade. Wine consumption is influenced by various factors including cultural preferences, economic conditions, health trends, and the rising demand for premium and artisanal products. In 2023, the global wine market was valued at around \$430 billion and is expected to grow at a CAGR of 4.3% between 2023 and 2028, driven by changing consumer habits, an increasing preference for premium wines, and the growth of the wine tourism industry.

Market Segmentation

The global wine market can be segmented by product type, distribution channel, and region:

1. By Type of Wine:

- Red Wine: The largest segment of the global wine market, accounting for over 55% of global wine consumption. Red wines like Cabernet Sauvignon, Merlot, and Pinot Noir remain popular globally due to their rich flavors and health benefits.
- White Wine: Represents around 35% of the market and is favored for its lighter, fresher taste. Popular varieties include Chardonnay, Sauvignon Blanc, and Riesling.
- Rosé Wine: Increasing in popularity, particularly among younger consumers. Rosé is light, refreshing, and often perceived as a trendy choice.
- Sparkling Wine: Includes Champagne, Prosecco, and Cava, accounting for about 10% of global consumption. Sparkling wines are popular for celebrations and special occasions.
- Fortified and Dessert Wines: This niche segment includes wines like Port, Sherry, and Vermouth, appealing to a smaller, more specialized audience.

2. By Distribution Channel:

- On-Trade (Restaurants, Bars, Hotels): A significant share of the market, especially for premium and luxury wines. The reopening of hospitality sectors post-pandemic has bolstered on-trade sales globally.
- Off-Trade (Retail, Supermarkets, E-commerce): Off-trade sales dominate the wine market, especially with the rise of online wine purchasing platforms. The growth of e-commerce has been particularly notable, with consumers increasingly purchasing wine online.

3. By Price Point:

- Economy Wines: The largest segment by volume, appealing to massmarket consumers, particularly in emerging markets.
- Premium and Super-Premium Wines: This segment is growing faster than economy wines, driven by rising disposable incomes, especially in developed markets like the US, UK, and Europe, where consumers are willing to pay more for quality and exclusivity.

Key Market Trends

1. Rising Demand for Premium and Organic Wines:

- Consumers are increasingly seeking premium wines, willing to pay more for quality, uniqueness, and craftsmanship. Premium wines are often perceived as healthier, and many consumers are drawn to artisanal and small-batch producers.
- Organic, biodynamic, and natural wines are seeing increased demand as consumers prioritize sustainability, environmental impact, and natural ingredients in their purchasing decisions.

2. Growth of E-commerce:

- The global shift to online shopping, accelerated by the COVID-19 pandemic, has transformed the wine industry. Wine consumers are increasingly purchasing wine through online platforms, both for convenience and access to a wider selection of wines.
- Subscription models and wine clubs are also growing in popularity, offering curated selections delivered to consumers' doors, often with educational content or tasting events.

3. Wine Tourism:

- Wine tourism has become a major driver for the wine industry, especially in regions such as France, Italy, Spain, the US, and Australia. Wineries are investing in experiential tourism offerings, such as vineyard tours, tastings, and hospitality services to attract visitors and build brand loyalty.
- Emerging wine regions in South America, Eastern Europe, and South Africa are also leveraging wine tourism as a growth strategy.

4. Health Consciousness:

- There is a rising trend of health-conscious consumers, which has led to increased consumption of wines perceived as healthier, such as red wines rich in antioxidants and low-sugar or low-alcohol wines.
- Non-alcoholic wine options are gaining traction, particularly among younger consumers and those looking to reduce alcohol consumption while still enjoying the wine experience.

5. Emergence of New Wine Regions:

• While traditional regions like France, Italy, and Spain continue to dominate, new wine-producing regions in countries like Argentina, Chile, New Zealand,

South Africa, and China are gaining international recognition for the quality and diversity of their wines.

• The global rise in interest for wines from diverse regions reflects changing consumer preferences toward exploration and discovery of new wine styles and flavors.

Global Wine Market by Region

1. Europe:

- Europe remains the world's largest wine-producing region, with key countries being France, Italy, and Spain. Together, these countries account for nearly 50% of global wine production.
- France, known for its Bordeaux, Burgundy, and Champagne regions, remains the global leader in premium and luxury wine production. Italy and Spain follow closely with renowned varieties like Chianti, Prosecco, and Rioja.
- European consumers, particularly in France, Italy, and Germany, continue to have the highest per capita wine consumption rates.

2. North America:

- The United States is the largest wine market outside of Europe, with California being the key wine-producing region. Napa Valley and Sonoma are internationally recognized for producing premium wines.
- Wine consumption in the US is driven by a shift in consumer preferences toward high-quality, premium wines, with millennials and Gen Z contributing to growing demand for innovative and sustainable wine brands.
- Canada is also a growing market for wine, with rising interest in both domestic production (especially in British Columbia and Ontario) and imports.

3. Asia-Pacific:

- The wine market in the Asia-Pacific region, especially China, Japan, and Australia, has been expanding rapidly.
- China is now one of the world's largest wine consumers, with a growing middle class interested in wine as a status symbol. Domestic wine production in China is also increasing, though imports from France and Australia remain strong.
- Australia and New Zealand have established themselves as major wine exporters, known for varieties such as Shiraz and Sauvignon Blanc.

4. Latin America:

- Argentina and Chile are the leading wine producers in Latin America, with Malbec and Carmenère being their flagship varietals, respectively.
- These countries have seen increasing global recognition for the quality of their wines, and both domestic and export markets are growing.

5. Middle East & Africa:

- South Africa is a key player in the global wine market, known for varieties like Pinotage and Chenin Blanc. The country exports a significant portion of its wine to Europe and the US.
- Wine consumption in the Middle East is limited due to cultural and religious factors, but there is a niche market for wine among expatriates and the affluent class, particularly in countries like the UAE.

Competitive Landscape

The global wine market is highly fragmented, with several key players and a large number of small to medium-sized producers. The major players dominate production, distribution, and marketing globally, but artisanal and boutique wineries are gaining traction in premium segments.

1. Major Players:

- E. & J. Gallo Winery (USA): One of the largest wine producers in the world, with a portfolio that includes mass-market brands as well as premium labels.
- Constellation Brands (USA): A major global producer and marketer of beer, wine, and spirits. Known for brands such as Robert Mondavi and Kim Crawford.
- Pernod Ricard (France): A leading global producer with brands like Jacob's Creek (Australia) and Campo Viejo (Spain).
- Treasury Wine Estates (Australia): A prominent player in premium wine production, with brands like Penfolds and Beringer.

2. Boutique Wineries:

• There is growing demand for small-scale, artisanal wines that emphasize sustainability, organic farming, and traditional winemaking methods. Boutique wineries, particularly in regions like Italy, France, and the US, are gaining attention for their focus on quality and unique expressions of terroir.

Conclusion

The global wine market is expected to continue its steady growth over the next few years, driven by rising demand for premium and organic wines, increasing e-commerce

sales, and the expansion of wine tourism. Traditional wine-producing regions like France, Italy, and Spain will continue to dominate the market, but emerging regions such as South America, China, and New Zealand will play a larger role in the industry's future. Wineries that can capitalize on trends like sustainability, premiumization, and digital sales will be well-positioned for success in this dynamic market.

Lebanon Wine Market Overview

Lebanon is a historic wine-producing country, with winemaking traditions dating back over 5,000 years. The country has a Mediterranean climate and varied terroirs, which are ideal for cultivating both indigenous and international grape varieties. Today, Lebanon's wine industry is growing in prominence both locally and internationally, with an estimated annual production of around 9 million bottles from about 50 wineries.

Despite its small size, Lebanon has a reputation for producing high-quality wines, particularly red wines made from international varieties like Cabernet Sauvignon, Merlot, and Syrah, as well as indigenous grapes like Obaideh and Merwah. The most famous Lebanese winery is Château Musar, which has played a crucial role in bringing Lebanese wines to international markets.

Market Size and Growth

The Lebanese wine market is valued at approximately \$55 million annually. Although relatively small, the market is experiencing steady growth due to increasing domestic consumption, the rise of wine tourism, and expanding export opportunities. In recent years, wine consumption in Lebanon has been on the rise, especially among the younger population and the urban middle class.

Key factors driving the growth of the Lebanese wine industry include:

- 1. Wine Tourism: Lebanon's scenic vineyards and historical winemaking traditions have become a draw for tourists. Wine festivals, vineyard tours, and tasting events are helping boost the local industry.
- 2. Export Growth: Approximately 40-50% of Lebanon's wine production is exported, with major markets in Europe, North America, and the Gulf countries.
- 3. Increasing Local Demand: While historically beer and arak (aniseed-flavored spirit) have been the preferred alcoholic beverages in Lebanon, wine is becoming increasingly popular, especially among younger and more affluent consumers.

Key Trends in the Lebanese Wine Market

1. Premiumization and Quality Focus:

- Lebanese wine producers are increasingly focusing on premium wines that reflect the country's unique terroir and winemaking heritage. This is in response to rising local and international demand for high-quality, boutique wines. Château Musar, Château Ksara, and Massaya are among the Lebanese wineries that have established a reputation for premium products.
- Many Lebanese wineries are emphasizing small-batch production, attention to detail, and traditional winemaking methods, combined with modern techniques, to appeal to wine enthusiasts.

2. Growth of Wine Tourism:

- Wine tourism has become a significant part of Lebanon's wine market. Key wine regions like the Bekaa Valley, Mount Lebanon, and Batroun attract both local and international tourists who visit vineyards for wine tastings and tours.
- Lebanese wineries have increasingly integrated tourism experiences, such as harvest festivals, wine dinners, and vineyard tours, offering an immersive experience for visitors

3. Sustainability and Organic Winemaking:

- A growing number of Lebanese wineries are adopting organic and biodynamic farming practices to appeal to environmentally conscious consumers. Given the increasing global focus on sustainability, wineries in Lebanon are moving towards organic certifications and environmentally friendly production methods.
- This trend reflects a broader global shift toward organic and natural wines, which are also gaining traction in Lebanon's domestic market.

4. Local Consumption and Demographic Shifts:

- Wine consumption in Lebanon is particularly popular among the younger generation and the middle class in urban areas like Beirut. Wine is becoming a more common part of the social and dining culture, particularly in upscale restaurants, bars, and wine shops.
- Local wine enthusiasts are increasingly curious about artisanal wines from boutique wineries, which has led to a growing interest in smaller producers focusing on indigenous grape varieties and unique blends.

5. Expanding Export Markets:

• Lebanese wine exports are steadily growing, with a significant portion of production being shipped to international markets. Key export destinations include France, the United States, the United Kingdom, and the Gulf States.

- Europe remains the largest market for Lebanese wines, where there is a growing appreciation for wines from the Eastern Mediterranean region, especially those with a story tied to Lebanese terroir and history.
- The Gulf Cooperation Council (GCC) countries, particularly the UAE and Qatar, are also important markets for Lebanese wines, driven by expatriate populations and high-end hotel and restaurant demand.

Challenges Facing the Lebanese Wine Industry

1. Economic and Political Instability:

- Lebanon's economic crisis, compounded by political instability, has affected the local wine market. The depreciation of the Lebanese pound, rising costs, and challenges with imports of essential materials (such as glass bottles and corks) have increased production costs.
- Additionally, disruptions in banking and financial systems have made it more difficult for wineries to access working capital and maintain stable export operations.

2. Competition from Imported Wines:

- Lebanon imports a significant amount of wine, particularly from France, Italy, and Spain, which are traditionally popular wine-producing countries. Imported wines can be competitively priced, which presents a challenge for local producers, especially in the premium segment.
- To differentiate, Lebanese wineries are increasingly focusing on the unique aspects of their products, such as the use of indigenous grape varieties and the distinct Lebanese terroir.

3. Climate Change:

- Climate change poses a threat to the Lebanese wine industry, particularly in terms of water scarcity and rising temperatures. Vineyards are increasingly exposed to extreme weather conditions, which can affect grape yields and quality.
- To address this, some wineries are adopting more sustainable farming practices, including water conservation techniques and choosing grape varieties that are more resilient to heat.

Major Players in the Lebanese Wine Market

1. Château Musar:

• Perhaps the most internationally renowned Lebanese winery, Château Musar has a legacy of producing unique, age-worthy wines that have gained a cult following around the world. The winery is known for its signature red blends, which combine international varieties with Lebanese indigenous grapes.

2. Château Ksara:

• One of the oldest and largest wineries in Lebanon, Château Ksara produces a wide range of wines, from affordable entry-level bottles to premium selections. Ksara exports to over 30 countries and is a leader in both domestic sales and international distribution.

3. Massaya:

• Known for its elegant wines that reflect the terroir of the Bekaa Valley, Massaya has built a strong reputation for both red and rosé wines. The winery also focuses on sustainable practices and is a popular destination for wine tourism.

4. Domaine Wardy:

• A rising star in Lebanese winemaking, Domaine Wardy is known for both its innovative blends and its focus on sustainable winemaking. The winery produces a variety of wines, including reds, whites, and rosés, that are popular both locally and internationally.

5. lxsir:

• Ixsir is a relatively young winery but has quickly gained a reputation for its modern approach to winemaking. The winery emphasizes sustainability and organic practices, and its wines have received international acclaim, particularly in Europe.

Outlook for the Lebanese Wine Market

1. Expansion of Exports:

• With an increasing focus on premium wines and growing international recognition, Lebanese wineries are expected to further expand their export markets. Emerging markets in Asia, particularly China and Japan, offer potential growth opportunities, along with further penetration into North American markets.

2. Increase in Wine Tourism:

• As Lebanon rebuilds its tourism industry, wineries will continue to play a central role in attracting tourists. The combination of cultural heritage, scenic vineyards, and wine experiences offers a compelling draw for both domestic and international visitors.

3. Focus on Indigenous Varieties:

• Lebanese wineries are likely to focus more on promoting indigenous grape varieties, such as Obaideh and Merwah, to differentiate their wines from those of other countries. These varieties provide Lebanese wines with a unique identity, which can be capitalized on in both local and export markets.

4. Sustainability and Organic Growth:

• With global wine consumers increasingly prioritizing sustainability, Lebanese wineries that adopt organic and biodynamic practices will have a competitive edge in the international market. The trend toward more environmentally conscious production methods is expected to grow over the next few years.

Conclusion

The Lebanese wine market is positioned for steady growth in both domestic and international markets. Despite challenges such as economic instability and competition from imports, the industry's focus on premiumization, wine tourism, and sustainability provides opportunities for expansion. Lebanon's unique terroir, long winemaking history, and growing reputation for high-quality wines are key strengths that will continue to drive demand both locally and globally.

Wine Regions in Lebanon

Lebanon boasts several prime regions for viticulture, thanks to its diverse climate and rich soil. Here are some of the top areas:

1. Bekaa Valley

- Overview: The heart of Lebanon's wine production, known for its fertile soil and ideal climate.
- Notable Wineries: Chateau Ksara, Cave Kouroum.
- Features: High altitude, long growing season, and a mix of traditional and modern winemaking techniques

2. Batroun

- Overview: A coastal region with a growing reputation for boutique wineries.
- Notable Wineries: Batroun Mountains, Sept Winery.
- Features: Organic and biodynamic practices, stunning coastal views [

3. Mount Lebanon

- Overview: Offers a mix of traditional and modern wineries with picturesque mountain scenery.
- Notable Wineries: Chateau Belle-Vue.
- Features: Cooler climate, diverse terroir

4. North Lebanon

- Overview: Emerging as a new region for wine production.
- Notable Wineries: Mont D'Almaz.
- Features: Clean mountain air, unique grape varieties

5. South Lebanon

- Overview: Another emerging region with potential for growth.
- Notable Wineries: Various small-scale producers.
- Features: Diverse microclimates, potential for unique wine profiles [

These regions offer a blend of traditional and innovative winemaking practices, making Lebanon a fascinating destination for wine enthusiasts.

About Mount Lebanon

Mount Lebanon is a fantastic region for viticulture, offering a unique blend of historical significance and ideal growing conditions. Here are some highlights:

Historical Significance

- Ancient Roots: The art of winemaking in Mount Lebanon dates back over 5,000 years to the Phoenician era.

This rich history adds a layer of cultural depth to the wines produced here.

Unique Terroir

- Climate: The region benefits from a Mediterranean climate with warm, dry summers and mild, wet winters, ideal for grape cultivation.
- Soil: The diverse soil types, including limestone and clay, contribute to the unique flavor profiles of the wines.

Notable Wineries

- Chateau Belle-Vue: Located in Bhamdoun, this winery is dedicated to producing exclusive wines using traditional farming methods. They farm organically and produce around 25,000 bottles annually

Tourism and Experience

- Wine Tours: Visitors can embark on wine tours to explore the vineyards, learn about the winemaking process, and taste exceptional wines
- Scenic Beauty: The dramatic slopes of the Mount Lebanon mountain range provide a stunning backdrop for vineyards, making it a captivating destination for wine enthusiasts

Mount Lebanon's combination of historical significance, unique terroir, and dedicated wineries makes it an ideal location for viticulture.

The Chouf Region

The Chouf region, located in the Mount Lebanon Governorate, is a historic and picturesque area known for its rich cultural heritage and stunning landscapes. Here are some highlights:

Geography and Climate

- Location: Situated southeast of Beirut, the Chouf region encompasses the western slopes of the Jabal Barouk massif
- Climate: The region enjoys a Mediterranean climate with mild, wet winters and warm, dry summers, making it suitable for viticulture.

Historical Significance

- Cultural Heritage: The Chouf region is steeped in history, with ancient ruins and traditional villages dotting the landscape.
- Cedars of Lebanon: The region is home to the largest forest of Cedars of Lebanon, a symbol of the country's natural beauty and heritage

Notable Wineries

- Chateau Musar: One of Lebanon's most renowned wineries, Chateau Musar is known for its exceptional wines and rich history. Founded in 1930, it has become a symbol of resilience and tradition.

Domaine des Tourelles: Nestled on the western edge of the Bekaa Valley, this historic winery has maintained its 19th-century winemaking traditions.

Tourism and Experience

- Wine Tours: Visitors can explore the vineyards, learn about the winemaking process, and taste the wines produced in the region.
- Scenic Beauty: The dramatic mountain scenery and lush forests make the Chouf region a captivating destination for wine enthusiasts and nature lovers alike.

The Chouf region offers a unique blend of history, culture, and natural beauty, making it an ideal location for viticulture and wine tourism.

Wine tourism in Lebanon

The thousands of years of wine history is well represented in Lebanese wine regions, Bekaa Valley and Batroun, where you can discover the passion and the history in every glass of wine you take. Discover Lebanese wine regions with us, our local partner wineries will provide memorable wine tourism experiences for you.

Lebanese Wine Regions

The biggest part of the winemaking takes place in two Lebanese wine regions: Bekaa Valley and Batroun.

Wine tourism in Lebanon is a vibrant and growing industry, thanks to the country's rich viticultural heritage and stunning landscapes. Here are some highlights:

Key Wine Regions

- Bekaa Valley: The heart of Lebanon's wine production, home to many of the country's oldest and most renowned wineries.
- Batroun: Known for its boutique wineries and beautiful coastal views.
- Mount Lebanon: Offers a mix of traditional and modern wineries with picturesque mountain scenery.

Popular Wineries to Visit

- Chateau Ksara: One of Lebanon's oldest and most famous wineries, offering tours and tastings in the Bekaa Valley.
- Massaya Winery: Located in Tanail and Faqra, this winery combines French expertise with Lebanese tradition
- Cave Kouroum: A state-of-the-art winery in the Bekaa Valley, known for its commitment to excellence and community focus.

Wine Tours and Experiences

- Tastings and Tours: Many wineries offer guided tours of their vineyards and cellars, along with tastings of their finest wines.
- Wine Festivals: Lebanon hosts several wine festivals throughout the year, celebrating the country's wine culture and offering visitors a chance to sample a wide variety of wines.

- Culinary Pairings: Some wineries offer food and wine pairing experiences, showcasing the best of Lebanese cuisine alongside their wines.

Cultural and Historical Significance

- Ancient Traditions: Lebanon's winemaking history dates back thousands of years, with evidence of wine production in Byblos over 5,000 years ago.
- French Influence: Modern Lebanese winemaking has been heavily influenced by French techniques and expertise, resulting in a unique blend of tradition and innovation

Planning Your Visit

- Best Time to Visit: The ideal time for wine tourism in Lebanon is during the harvest season (August to October) when the vineyards are bustling with activity.
- Accommodations: Many wineries offer on-site accommodations or are located near charming guesthouses and boutique hotels.

Lebanon's wine tourism offers a rich and immersive experience, combining beautiful landscapes, historical significance, and exceptional wines.

Business Plan for a Winery in Joun, Lebanon:

Introducing "Joun Vineyards"

Executive Summary

The winery, tentatively named Joun Vineyards, will be located in Joun, a picturesque town in southern Lebanon. Known for its natural beauty and proximity to historical and cultural sites, Joun offers a strategic location for producing and marketing high-quality, boutique wines. The winery will produce a variety of wines, focusing on both local and international grape varieties, leveraging Lebanon's favorable climate and winemaking heritage.

The business will target both the local Lebanese market and export markets, particularly in Europe, North America, and the Middle East. Joun Vineyards will focus on producing high-quality wines, using sustainable practices and creating a distinct brand tied to Lebanese terroir and tradition.

Mission Statement

Our mission is to produce premium wines that reflect the unique terroir of Joun, embracing both traditional Lebanese winemaking techniques and modern innovation. Joun Vineyards aims to become a notable player in Lebanon's growing wine industry, promoting Lebanese wine culture locally and internationally.

Objectives

- 1. Wine Production: Establish a vineyard and produce 60,000 bottles in the first year, with a target of increasing production by 20% annually.
- 2. Market Positioning: Build a reputation for high-quality, boutique wines that capture the essence of Lebanon's terroir.
- 3. Sales & Distribution: Enter both the domestic and export markets, with an emphasis on wine shops, restaurants, and e-commerce platforms.
- 4. Sustainability: Employ environmentally sustainable practices in both vineyard management and wine production.
- 5. Tourism: Develop a wine tourism component, including wine tasting events and vineyard tours to attract both local visitors and tourists.

Industry Overview

Lebanon's wine industry has experienced significant growth in the past two decades. With a history of winemaking that dates back over 5,000 years, the country is renowned for its rich wine heritage. Lebanese wines are gaining international recognition, especially for their unique Mediterranean flavor profiles and the use of indigenous grape varieties like Obaideh and Merwah, alongside more familiar varieties like Cabernet Sauvignon, Syrah, and Chardonnay.

Market Trends

- Rising Demand for Boutique Wines: Both in Lebanon and internationally, there is a growing preference for boutique, artisanal wines that tell a story and reflect their place of origin.
- Growing Export Markets: Lebanese wines are becoming more popular in Europe, North America, and the Middle East, with Lebanese winemakers increasingly focused on exporting.
- Wine Tourism: Wine tourism is becoming a significant industry in Lebanon, particularly in areas like the Bekaa Valley. Joun, with its beautiful landscapes and proximity to Beirut, has strong potential for wine tourism.

SWOT Analysis

Strengths:

- Location: Joun's favorable climate for grape cultivation, with a mix of Mediterranean and mountainous terrain, provides ideal conditions for winemaking.
- Heritage: Lebanon's long history of winemaking provides strong cultural and market appeal.

• Proximity to Beirut: Close access to the capital for both logistical reasons and as a market for wine sales and tourism.

Weaknesses:

- Initial Investment: High capital requirements for land acquisition, vineyard establishment, and winery construction.
- Market Competition: Increasing competition from both established Lebanese wineries and international brands.

Opportunities:

- Export Markets: Strong opportunities for exporting Lebanese wines to international markets, especially in Europe and the US.
- Wine Tourism: Wine tourism is underdeveloped in the southern regions of Lebanon, providing an opportunity to differentiate Joun Vineyards.
- Sustainability: Sustainable winemaking practices are increasingly important to consumers, and adopting these could offer a competitive edge.

Threats:

- Economic Instability: Lebanon's economic and political instability may pose challenges for both domestic sales and export logistics.
- Climate Change: Changing weather patterns could affect grape growing conditions in the long term.

Products and Services

Wine Varieties:

- Red Wines: Focus on Cabernet Sauvignon, Syrah, and Merlot, which are popular both locally and internationally.
- White Wines: Produce Chardonnay and local varieties like Obaideh and Merwah to appeal to niche markets.
- Rosé: Leveraging the trend toward light, summery wines, the winery will produce a rosé using both local and international varieties.

Wine Tourism:

 Vineyard Tours: Offer tours of the vineyard and winemaking facilities, educating visitors about the winemaking process and the unique characteristics of Lebanese terroir.

- Wine Tasting: Create a tasting room where visitors can sample different wines, paired with local Lebanese food.
- Events: Host wine-themed events, such as harvest festivals, weddings, and corporate retreats.

Market Analysis

Target Market:

1. Domestic Market:

- Restaurants and Hotels: Target high-end restaurants, hotels, and resorts in Beirut and other urban centers.
- Retail: Sell wines through specialized wine shops and upscale grocery stores. Also, establish a direct-to-consumer online sales channel.
- Local Wine Enthusiasts: Leverage the growing interest in boutique wines, particularly among young professionals and expats.

2. International Market:

- Export to Europe and North America: Lebanese wines are gaining recognition in these regions. Focus on distributors who specialize in Middle Eastern or Mediterranean products.
- Gulf States: While the Gulf market is smaller, there is strong demand among expatriates and high-income residents for premium wines.

Marketing Strategy

- 1. Branding: Position Joun Vineyards as a premium, boutique winery that emphasizes quality, tradition, and sustainability. Highlight the unique terroir and craftsmanship of each bottle.
- 2. Online Presence: Develop a comprehensive website that includes e-commerce functionality for direct-to-consumer sales. Leverage social media platforms (Instagram, Facebook) to build brand awareness and engage with wine enthusiasts.
- 3. Wine Tourism Promotion: Partner with tour operators, local hotels, and restaurants to promote vineyard tours and wine tasting events. Collaborate with influencers to attract a younger audience.
- 4. Events and Collaborations: Participate in local and international wine fairs, festivals, and competitions to raise the profile of Joun Vineyards.

Operations Plan

1. Vineyard Establishment:

- Land acquisition in Joun.
- Soil testing and preparation.
- Planting of grapevines, focusing on varieties suited to Lebanon's climate and consumer preferences.

2. Winery Construction:

- Construction of winemaking facilities, including fermentation tanks, cellars, and a bottling line.
 - Building a visitor center and tasting room to support wine tourism.

3. Staffing:

- Hire a winemaker with experience in both traditional and modern winemaking techniques.
 - Vineyard workers and seasonal labor for harvest.
 - Marketing and sales team for domestic and international sales.

4. Sustainable Practices:

• Employ organic farming techniques, reduce water usage, and implement solar energy solutions to minimize the environmental impact of the winery.

Financial Plan

Startup Costs:

- Land Acquisition: \$300,000
- Vineyard Setup: \$100,000 (soil preparation, planting)
- Winery Construction: \$500,000 (includes machinery, building, and tasting room)
 - Initial Marketing and Branding: \$50,000
 - Staffing (First Year): \$100,000
 - Total Initial Investment: \$1,050,000

Revenue Projections:

• Year 1: Production of 60,000 bottles at an average price of \$15 per bottle = \$900.000 in revenue.

- Year 2: Production increases to 72,000 bottles, with anticipated revenue of \$1,080,000.
- Year 3: Production increases to 90,000 bottles, with revenue of \$1,350,000.

Profit Margins:

- Gross profit margin: ~50%
- Net profit margin: ~20-25% by Year 3, after accounting for operational expenses and debt servicing.

Conclusion

Joun Vineyards has the potential to become a premier winery in Lebanon, leveraging the country's rich winemaking heritage and the unique terroir of the Joun region. By focusing on premium, boutique production, sustainable practices, and wine tourism, the winery can establish itself both locally and internationally. With proper investment in quality, marketing, and distribution, Joun Vineyards is poised for long-term success.

Challenges Affecting Wineries in lebanon

Wineries in Lebanon face several challenges that affect their production, distribution, and overall profitability. These challenges stem from a combination of economic, environmental, and political factors that create difficulties for winemakers operating in the country. Below are some of the key challenges:

1. Economic Crisis and Currency Fluctuations

- Currency Depreciation: The Lebanese pound (LBP) has significantly depreciated in value over recent years, leading to increased costs for importing essential production materials such as glass bottles, corks, and equipment. Many wineries rely on imported goods, and the devaluation makes these supplies more expensive, reducing profitability.
- Inflation: High inflation rates have affected the purchasing power of consumers within Lebanon, decreasing domestic wine sales. Wineries face challenges in pricing their products affordably while covering the rising costs of production.
- Access to Financing: Lebanon's financial and banking crisis has severely restricted access to loans and financing. Wineries struggle to secure capital for investments in infrastructure, equipment, and marketing. The inability to access funds also impacts export operations and the purchase of raw materials.

2. Political Instability

- Unstable Governance: Frequent changes in government, political unrest, and lack of consistent policies create an unpredictable environment for businesses in Lebanon. Wineries are impacted by the lack of government support for the agricultural sector, limited infrastructure development, and inconsistent economic policies.
- Security Concerns: Political tensions and security issues, including regional conflicts, can disrupt production and export activities. Wineries often face disruptions in supply chains and difficulty in maintaining steady production schedules during periods of instability.

3. Climate Change and Environmental Challenges

- Water Scarcity: Lebanon's agricultural sector, including winemaking, is increasingly facing water scarcity due to prolonged droughts and erratic weather patterns. This can significantly affect vineyard yields and grape quality. Irrigation, which is vital for consistent production, is becoming more challenging and costly.
- Extreme Weather: Rising temperatures and unpredictable weather patterns pose risks to grape cultivation. Vineyards are vulnerable to extreme heat, frost, and changes in rainfall, which can affect both the quantity and quality of the grape harvest.
- Pest and Disease Management: Climate change has led to the emergence of new pests and diseases in vineyards. Winemakers are required to invest more in pest control and vineyard management, further increasing operational costs.

4. High Production Costs

- Imported Materials: Lebanese wineries import a significant portion of their bottling materials, including glass bottles, corks, and capsules, due to the lack of local suppliers. With rising shipping and import costs, these materials become increasingly expensive, especially with the depreciation of the local currency.
- Energy Costs: Lebanon suffers from unreliable electricity and energy supplies, forcing many wineries to invest in alternative energy sources, such as generators or solar power. This adds to the operational costs, particularly as fuel prices continue to rise.

5. Competition from Imported Wines

• Imported Wines: Lebanon imports a large amount of wine, particularly from France, Italy, and Spain. Imported wines often compete with local production, particularly in the premium segment. International wines can sometimes be more competitively priced, putting pressure on Lebanese wineries to maintain their market share.

• Consumer Preferences: While Lebanese wine consumption is growing, a significant portion of the market still prefers well-established international wine brands, making it challenging for local wineries to increase their domestic market penetration.

6. Limited Government Support and Infrastructure

- Lack of Subsidies and Incentives: Unlike some wine-producing countries, Lebanon provides limited government subsidies or incentives for the wine industry. Wineries often face high taxes and duties, with minimal support in terms of marketing or international promotion.
- Poor Infrastructure: Lebanon's outdated and inadequate infrastructure, including transportation networks and port facilities, creates logistical challenges for wineries. Poor roads and transportation systems can delay the distribution of products both locally and for export.
- Bureaucracy and Regulation: The bureaucracy surrounding wine production, licensing, and export can be cumbersome and time-consuming. This adds administrative hurdles for wineries seeking to expand their operations or export to new markets.

7. Export Market Challenges

- Global Competition: Lebanese wineries face stiff competition in international markets from established wine-producing countries such as France, Italy, Spain, and the US. Breaking into new markets requires significant investment in marketing, branding, and distribution networks, which can be difficult without sufficient financial backing.
- Shipping and Logistics: High transportation costs and logistical challenges, particularly in light of global supply chain disruptions, make exporting wines more expensive. The Beirut port explosion in 2020 exacerbated these issues, as it impacted Lebanon's main shipping hub and further strained export operations.

8. Cultural and Consumer Awareness

- Limited Wine Culture: While wine consumption is growing in Lebanon, it is still lower compared to other Mediterranean countries. Beer, arak, and spirits are traditionally more popular, and wineries need to invest in promoting wine culture and educating consumers on the value of Lebanese wines.
- Pricing Sensitivity: Lebanese consumers are price-sensitive, especially in the current economic climate. Wineries must balance between producing high-quality wines and keeping prices competitive in a challenging economy where consumers have less disposable income.

9. Brand Recognition and Marketing

- Building Brand Identity: Lebanese wineries, especially newer and smaller ones, struggle to build strong brand recognition locally and internationally. Competing with well-known international wine brands can be difficult, and many Lebanese wineries lack the resources to invest heavily in marketing and brand development.
- Limited Access to Global Distribution: Lebanese wines often face challenges in accessing global retail networks. Distributors and importers tend to prioritize established wine brands from countries with a strong wine heritage, making it difficult for Lebanese wines to gain shelf space in key markets.

Opportunities Despite the Challenges

While Lebanese wineries face significant challenges, there are also opportunities for growth, including:

- 1. Focus on Exports: The growing international demand for wines from the Eastern Mediterranean region provides an opportunity for Lebanese wineries to increase exports, particularly to Europe, North America, and the Gulf region.
- 2. Wine Tourism: Expanding wine tourism could offer a significant boost to the industry, with Lebanon's scenic vineyards and rich history making it an attractive destination for wine enthusiasts.
- 3. Organic and Sustainable Winemaking: Focusing on organic and sustainable practices can help Lebanese wineries tap into the global trend toward environmentally conscious products, appealing to health-conscious and environmentally aware consumers.
- 4. Promotion of Indigenous Varieties: Lebanese wineries that focus on indigenous grape varieties like Obaideh and Merwah can create a unique identity that differentiates them from international competitors. Promoting these unique flavors to both local and global consumers can enhance the appeal of Lebanese wines.

In summary, while the Lebanese wine industry faces numerous obstacles, including economic instability, climate change, and international competition, it also has the potential to grow by focusing on niche markets, sustainable production, and expanding its presence in international markets. Wineries that can adapt to these challenges while maintaining quality and innovation will be best positioned for success.

Positive Impacts On the Town's Economic Development

The establishment and growth of industries such as wineries, olive oil factories, or soap production businesses in Joun, a town in Lebanon, could have several positive impacts on the town's economic development. Here are the key ways in which these industries could boost the local economy:

1. Job Creation and Employment Opportunities

- Direct Employment: Establishing wineries, olive oil factories, or soap production units would directly create jobs for local residents. Positions would range from agricultural workers, factory staff, and production managers to marketing, sales, and administrative roles.
- Indirect Employment: The development of such industries would create indirect employment in related sectors, such as logistics, packaging, transportation, retail, and tourism. For example, wineries could generate jobs in hospitality and tourism-related services.
- Agriculture-Based Employment: Wineries and olive oil factories would rely heavily on local agriculture, thus providing work for farmers, vineyard managers, olive growers, and seasonal laborers during harvest periods. This would create a steady income stream for people involved in agricultural production.

2. Development of Local Infrastructure

- Improved Transportation and Connectivity: Increased industrial activity would likely lead to improvements in local infrastructure, including better roads, transportation networks, and utility services to support the distribution of goods. This would enhance overall connectivity for Joun and improve access to regional markets.
- Energy and Water Systems: Investment in sustainable energy sources like solar power, water conservation systems, and improved irrigation techniques for vineyards and olive groves could lead to modernization and better infrastructure within the town, benefiting the entire community.

3. Promotion of Local Tourism

- Wine and Olive Oil Tourism: Wineries and olive oil factories could become tourist attractions, drawing visitors to Joun for vineyard tours, tastings, and cultural experiences. This would create opportunities for local businesses such as restaurants, cafes, bed and breakfasts, and souvenir shops to thrive.
- Cultural Heritage Promotion: By promoting local products tied to Lebanon's rich cultural history, such as wine, olive oil, and soap, Joun can position itself

as a hub of heritage tourism. Visitors attracted to these experiences would contribute to the local economy by spending on food, lodging, and cultural activities.

4. Stimulation of Local Businesses and Entrepreneurship

- Support for Small Businesses: The growth of industries in Joun could encourage the emergence of local businesses that cater to the needs of factories and tourists. For example, small packaging companies, artisan food producers, and local craftspeople could find new business opportunities.
- Entrepreneurial Opportunities: Local entrepreneurs may be inspired to start complementary businesses, such as organic farming, artisanal cheese production, boutique hotels, or specialty shops selling locally produced goods. This would diversify the town's economic base and reduce its reliance on traditional sectors.

5. Increased Export Opportunities

- Export of Local Products: The production of high-quality wines, olive oil, and olive oil-based soaps could open up opportunities for exporting these goods to international markets. By promoting Joun's local products abroad, businesses could bring foreign revenue into the town, strengthening the local economy.
- Brand Recognition for Joun: By developing high-quality, artisanal products, Joun could build a reputation as a center for premium goods, both nationally and internationally. This brand recognition would benefit local businesses by increasing demand and creating a sense of prestige around products from Joun.

6. Economic Diversification

- Reduced Dependence on Traditional Sectors: Historically, small Lebanese towns have relied heavily on agriculture or remittances. Establishing wineries, olive oil factories, or soap production facilities would diversify Joun's economy, making it more resilient to economic fluctuations in agriculture or global financial crises.
- Value-Added Agriculture: By processing local crops like grapes and olives into value-added products (wine and olive oil), Joun's economy could capture a larger share of the agricultural value chain, thus increasing income levels for local producers.

7. Training and Skill Development

• Skill Upgrading: The introduction of new industries would lead to skill development for the local workforce. Workers would acquire expertise in modern agricultural techniques, winemaking, oil extraction, and soap production, improving their employability.

• Youth Employment and Retention: Providing modern employment opportunities within Joun can help retain young people in the area, reducing brain drain and keeping local talent invested in the town's economic future.

8. Increased Government and Private Investment

- Public-Private Partnerships: Success in these industries could attract further government or private sector investments in infrastructure and business development in Joun. This may include better roads, utilities, and grants for expanding businesses, which would contribute to long-term economic growth.
- Foreign Direct Investment (FDI): The international success of Joun-based products, particularly wines and olive oils, could attract foreign investment in local industries, further boosting the town's economy and creating more jobs.

9. Environmental and Sustainable Development

- Sustainable Agriculture: With a focus on organic and sustainable practices, particularly in the wine and olive oil sectors, Joun could position itself as a model for environmentally friendly development. This would not only attract ecoconscious consumers and tourists but also ensure the long-term viability of the region's natural resources.
- Promotion of Eco-Tourism: The natural beauty of Joun, combined with sustainable agricultural practices, could promote eco-tourism, where visitors experience the natural environment while learning about environmentally friendly farming techniques.

Conclusion

The development of industries such as wineries, olive oil factories, and soap production in Joun can have a transformative impact on the town's economy. These sectors would generate employment, boost local infrastructure, promote tourism, stimulate entrepreneurship, and attract both local and international investment.

By diversifying its economic base and focusing on high-value, artisanal products, Joun can position itself as a key player in Lebanon's growing wine, olive oil, and soap industries. The combination of economic growth, job creation, and cultural preservation could lead to a more prosperous and sustainable future for the town and its residents.

The Winemaking Process

Detailed Winery Processes Flowchart

1. Viticulture

- Grape Selection: Choosing the right grape variety based on soil, climate, and desired wine style.
- Vineyard Management: Pruning, trellising, and canopy management to ensure healthy growth.

2. Harvesting

- Timing: Determining the optimal time to harvest based on grape maturity and sugar levels.
 - Picking: Hand-picking or mechanical harvesting of grapes.

3. Crushing and Destemming

- Crushing: Breaking the grape skins to release juice.
- Destemming: Removing stems from the grapes to prevent bitterness.

4. Fermentation

- Primary Fermentation: Adding yeast to the must (crushed grapes) to convert sugars into alcohol.
- Punching Down/Maceration: Submerging the cap (skins and solids) to extract color, flavor, and tannins.
 - Secondary Fermentation: Optional for red wines to further develop flavors.

5. Pressing

- Pressing: Extracting juice from the remaining grape solids (pomace).

6. Aging

- Barrel Aging: Storing wine in oak barrels to impart flavor and complexity.
- Tank Aging: Storing wine in stainless steel tanks for a cleaner, fruitier profile.

7. Clarification

- Racking: Transferring wine off the sediment to clarify it.
- Fining: Adding substances to coagulate and remove suspended particles.
- Filtration: Passing wine through filters to remove any remaining impurities.

8. Blending

- Blending: Combining different batches of wine to achieve the desired flavor profile.

9. Bottling

- Bottling: Filling bottles and sealing them with corks or screw caps.
- Corking: Inserting corks into bottles, often with a machine.

10. Storage and Aging

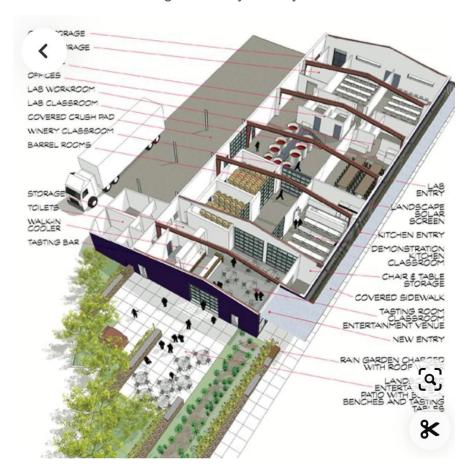
- Cellaring: Storing bottled wine in a controlled environment to age and mature.

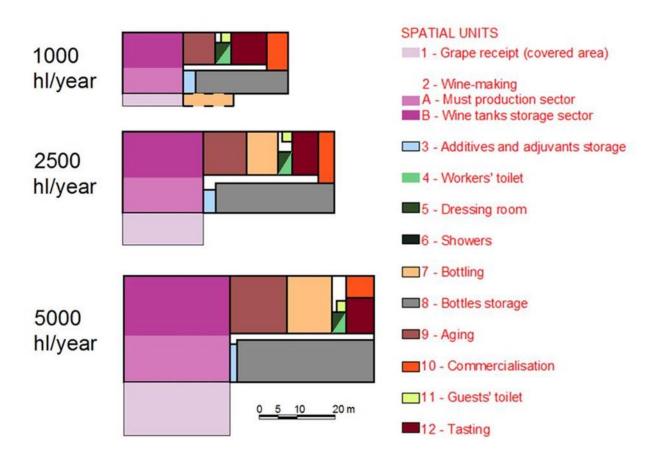
11. Packaging and Distribution

- Labeling: Applying labels with necessary information and branding.
- Packaging: Preparing wine for shipment, including protective packaging.
- Distribution: Transporting wine to retailers, restaurants, and consumers.

Site Layout

Creating a site layout for a winery involves strategically positioning the vineyards, production facilities, visitor areas, and other essential components to maximize operational efficiency, visitor experience, and environmental sustainability. Below is a detailed breakdown of how to design a winery site layout:





1. Key Sections of the Winery Layout

a. Vineyard Blocks

- Grape Varieties: Divide the land into vineyard blocks based on grape varieties, taking into account soil conditions and sun exposure. Varieties that require more sun should be placed on south-facing slopes, while others can be planted in areas with more shade.
- Row Orientation: Vineyard rows should be oriented to maximize sunlight and airflow, ideally running north-south for optimal sun exposure and to prevent diseases.
- Irrigation: Ensure the vineyard layout includes an efficient drip irrigation system with access to water tanks or reservoirs.

b. Winery Production Facilities

- Crushing and Fermentation Area: Place this close to the vineyards to minimize the time between harvest and processing. This will house the grape crushing equipment and fermentation tanks.
 - Ensure adequate drainage and ventilation.
- Barrel Storage (Aging Cellar): A cool, temperature-controlled space for barrel aging, ideally located underground or in a climate-controlled room.
 - Accessibility for visitors if offering tours of the barrel room.
- Bottling and Packaging: A dedicated area for bottling and labeling the wine, located near storage for efficiency. This space should have access for trucks to load products for distribution.

c. Tasting Room and Visitor Areas

- Tasting Room: Positioned to offer views of the vineyards or production area, providing visitors with a scenic experience. It should be easily accessible from the main entrance and parking areas.
- A wine shop should be located within or near the tasting room to allow visitors to purchase wines and merchandise.
- Outdoor Seating and Event Spaces: Create an outdoor seating area with a view of the vineyard or event space where you can host tastings, festivals, and weddings. This could include a patio, garden, or deck.

d. Administrative and Staff Facilities

- Offices: Include office space for winery management, sales, and administration. These should be located near the production areas but separate from visitor spaces.
- Staff Break Area: Provide a private area for employees to rest and take breaks.

2. Flow and Access

a. Vehicle and Pedestrian Flow

- Visitor Parking: Design a visitor parking lot near the entrance and the tasting room. Make sure there's enough space for cars and tour buses, with easy access to visitor pathways.
- Service and Delivery Access: Create separate roads for trucks and delivery vehicles to transport grapes, bottles, and supplies. This route should lead directly to the production facility and storage areas.
- Pedestrian Pathways: Design walking paths for visitors that guide them from parking to the reception, tasting room, vineyard tour areas, and event spaces. These should be well-marked and easy to navigate.

b. Accessibility

• Ensure compliance with accessibility standards for people with disabilities. This includes ramps, wide paths, and accessible restrooms near visitor areas.

3. Zoning and Sustainability

a. Environmental Considerations

- Renewable Energy: Incorporate renewable energy sources like solar panels on rooftops or in open areas to power the winery.
- Waste Management: Set aside areas for composting organic waste (grape skins, seeds) and managing wastewater.

b. Zoning for Expansion

• Plan for future growth by leaving room for expanding production, adding new vineyard blocks, or developing additional visitor facilities (e.g., a restaurant or boutique hotel).

4. Basic Site Layout Profile

Here's a basic outline for a winery site plan:

1. Vineyard Area

- Grape Varieties: Designate areas for different grape varieties based on soil and climate conditions.
- Irrigation System: Plan for an efficient irrigation system to maintain vine health.

Details of the Vineyard Layout

- Vineyard Blocks: Divide the vineyards into different blocks based on grape varieties, soil conditions, and sun exposure. This makes it easier to manage different grape types and optimize the growing environment for each.
- Consider planting rows on south-facing slopes for maximum sun exposure. Rows should be planted along the slope for optimal water drainage and sunlight distribution.
- Leave adequate spacing between rows to allow for machinery, such as tractors or harvesters, to pass through.
- Irrigation System: Incorporate an efficient drip irrigation system that supplies water to the roots while minimizing evaporation. Water storage tanks should be placed nearby for easy access.

2. Harvesting Area

- Picking Zone: Allocate space for grape picking, including storage for harvested grapes.
- Transportation: Ensure easy access for transporting grapes from the vineyard to the processing area.

3. Processing Area

- Crushing and Destemming: Space for equipment to crush and destem grapes.
- Fermentation Tanks: Designated area for fermentation tanks, both primary and secondary.
- Pressing Area: Space for grape presses to extract juice.

Details of the Production Area (Winery Building):

- Crushing and Fermentation Area: Locate this area close to the vineyards to minimize the time between grape harvest and processing.
- The crushing and fermentation room should be designed with proper drainage and ventilation to handle grape processing and the fermentation gases.

- Barrel Room/Cellar: This area needs to be temperature and humidity-controlled for aging the wine in barrels. Ideally, it should be partially or fully underground to maintain cooler temperatures naturally.
- Access to the Tasting Room: If the winery offers tours, ensure that the barrel room is accessible to visitors for an authentic experience.
- Bottling and Storage Area: A dedicated section should be included for bottling, packaging, and storage of wine bottles. It should have easy access for trucks for shipping and distribution purposes.
- Waste Management: Place waste disposal areas for byproducts like grape skins, seeds, and wastewater in a designated area away from the main visitor paths to ensure environmental compliance and aesthetic appeal.

4. Aging and Storage

- Barrel Rooms: Storage for oak barrels where wine will age.
- Tank Rooms: Stainless steel tanks for aging wines that require a different profile.
- Bottling Line: Area for bottling and labeling wine.

5. Tasting Room and Visitor Center

- Tasting Room: Space for visitors to taste wines and learn about the winemaking process.
- Visitor Amenities: Restrooms, seating areas, and possibly a small café or gift shop.

Details of the Visitor Areas

- Tasting Room: This should be located with a view of the vineyards or production facilities to offer an immersive experience. Consider floor-to-ceiling windows or outdoor terraces overlooking the vines.
- Include space for indoor seating as well as outdoor seating for visitors to enjoy the scenery.
- Offer a wine shop within the tasting room for visitors to purchase wine and merchandise.
- Reception Area: A small building or space at the entrance where visitors check in, get information, or book tours.
- Parking Area: Place visitor parking near the reception or tasting room. Ensure it's large enough for tourist buses or groups and easy to navigate.

• Outdoor Event Space: If hosting wine festivals, tastings, or weddings, plan for a dedicated event area, such as a lawn or terrace with views of the vineyards. Provide shaded areas, seating, and facilities for catering.

Hospitality Facilities (Optional)

- Restaurant or Café: If the winery offers food, design the restaurant near the tasting room with both indoor and outdoor seating that capitalizes on scenic views of the vineyards.
- Consider open kitchens or barbecue pits where local cuisine can be prepared and paired with wines.
- Accommodation: If your business plan includes wine tourism with overnight stays, plan for guest cottages or a small boutique hotel on-site, preferably at a higher elevation with sweeping views of the vineyard.

6. Offices and Storage

- Administrative Offices: Offices for management and administrative staff.
- Equipment Storage: Secure storage for winemaking equipment and supplies.

Details of the Administrative and Operational Spaces

- Office Space: Designate space within the winery building for management, sales, and administrative staff. Ensure it is separate from production areas to maintain a professional working environment.
- Restrooms: Place restrooms near the tasting room and visitor areas. If hosting events, ensure adequate facilities to handle larger crowds.

7. Additional Facilities

- Laboratory: Space for quality control and testing of wine.
- Maintenance Area: Area for equipment maintenance and repairs.
- Employee Facilities: Break rooms, locker rooms, and rest areas for staff.

8. Environmental Considerations

- Sustainability Practices: Incorporate sustainable practices such as solar panels, rainwater harvesting, and organic farming.
- Waste Management: Plan for composting and recycling facilities.

More Considerations:

Traffic Flow and Access

a. Internal Roads

- Design roads that allow easy transportation of grapes from the vineyard to the production facility. These should be wide enough for trucks, tractors, and other farm machinery.
- Create separate paths for visitors and operational traffic to ensure safety and avoid disruptions during tours or events.

b. Pedestrian Pathways

 Develop walking paths that guide visitors from the parking area to the reception, tasting room, vineyard, and event areas. Ensure these paths are well-marked and comfortable to walk on, with shaded areas and viewpoints along the way.

c. Accessibility

• The layout should consider accessibility for people with disabilities, ensuring that all public areas (tasting room, reception, and restrooms) are accessible via ramps or elevators.

Site Zoning

- a. Zoning for Production and Operational Efficiency
 - Vineyards: Should be placed in optimal growing areas based on soil, elevation, and sunlight.
 - Production Facilities: Position the winery building (crushing, fermentation, bottling, storage) close to the vineyards for easy transportation and processing of grapes. The proximity helps with quality control by reducing the time from harvest to production.

b. Zoning for Visitors

- Ensure that visitor areas (tasting rooms, event spaces) are separate from the operational areas but close enough to provide an immersive experience.
- Consider guided pathways or elevated walkways that take visitors through or above the production areas without interfering with daily operations.

Sustainability Considerations

a. Solar Power

 If possible, design the site to take advantage of solar energy by installing solar panels on rooftops of the winery building or parking shelters. This will help reduce energy costs and increase the winery's sustainability credentials.

b. Rainwater Harvesting

 Implement a system to capture rainwater for use in irrigation and other winery operations. Place rainwater collection tanks strategically around the vineyard and production facility.

c. Waste Management and Recycling

 Designate space for composting organic waste (grape skins, seeds) and recycling glass bottles. Plan an eco-friendly wastewater treatment system to minimize environmental impact.

5. Security and Safety

- Install fencing around the perimeter of the vineyard and facility to protect the crops and ensure safety.
- Design emergency fire lanes and exits around the production site.

Ensuring High Quality and Obtaining Certifications

Ensuring high quality and obtaining certifications for your winery can significantly enhance its reputation and marketability. Here are some key aspects to consider:

1. Quality Control

- Regular Testing: Conduct regular tests for factors like acidity, sugar levels, alcohol content, and microbial stability.
- Tasting Panels: Use expert tasting panels to evaluate the wine's flavor, aroma, and overall quality.
- Consistency: Maintain consistency in wine production to ensure each batch meets your quality standards.

2. Certification Programs

- Wine & Spirit Education Trust (WSET): Offers various levels of wine education and certification, from beginner to advanced levels.
- International Organization of Vine and Wine (OIV): Provides standards and guidelines for wine production and quality.

- Certified Sustainable: Programs like the California Sustainable Winegrowing Alliance offer certification for sustainable practices.
- European Wine Quality Standard: Certification that ensures compliance with quality criteria set by the European Economic Chamber of Trade, Commerce, and Industry.

3. Sustainable Practices

- Environmental Impact: Implement sustainable practices such as water conservation, renewable energy use, and organic farming.
- Certification: Obtain certifications like organic, biodynamic, or sustainable to appeal to eco-conscious consumers.

4. Marketing and Labeling

- Labeling: Ensure your labels clearly communicate the quality and certifications of your wine.
- Marketing: Highlight quality and certifications in your marketing materials to attract discerning customers.

5. Continuous Improvement

- Feedback: Gather feedback from customers and experts to continuously improve your wine.
- Training: Invest in ongoing training for your staff to maintain high standards.

International Donors and Grants Organizations

Below are some well-known organizations that offer grants for various projects, including agricultural development and sustainability:

- 1. Bill & Melinda Gates Foundation: Focuses on global health, poverty alleviation, and education.
- 2. Ford Foundation: Supports initiatives in human rights, economic fairness, and social justice.
- 3. Rockefeller Foundation: Works on health, food security, and environmental sustainability.
- 4. Open Society Foundations: Promotes democratic governance, human rights, and social reform.
- 5. The World Bank: Provides financial and technical assistance for development projects.

- 6. UNICEF: Focuses on children's rights, survival, development, and protection.
- 7. USAID: Supports international development and humanitarian efforts.
- 8. European Commission: Provides funding for various development and humanitarian projects.
- 9. Global Environment Facility (GEF): Addresses global environmental issues.
- 10. International Fund for Agricultural Development (IFAD): Focuses on rural poverty reduction and food security.
- 11. World Health Organization (WHO): Works on global health issues and emergencies.
- 12. UNDP: Promotes sustainable development and poverty reduction.
- 13. CARE International: Focuses on fighting global poverty and social injustice.
- 14. Save the Children: Works to improve the lives of children worldwide.
- 15. Oxfam International: Focuses on alleviating global poverty and injustice.
- 16. The Asia Foundation: Supports development and rule of law in Asia.
- 17. The Nature Conservancy: Works on conservation and sustainability.
- 18. The International Rescue Committee (IRC): Provides emergency aid and long-term assistance.
- 19. World Wildlife Fund (WWF): Focuses on conservation and environmental protection.
- 20. The Rockefeller Foundation: Supports innovative solutions to global challenges.
- 21. The MacArthur Foundation: Focuses on creative and effective solutions to critical problems.
- 22. The Carter Center: Works on human rights, conflict resolution, and global health.
- 23. The Asia Foundation: Supports development and rule of law in Asia.
- 24. The International Rescue Committee (IRC): Provides emergency aid and long-term assistance.
- 25. World Wildlife Fund (WWF): Focuses on conservation and environmental protection.

CONCLUSION:

Positive Impact of establishment of growth of industries on the Town Economic Development

The establishment and growth of industries such as wineries, olive oil factories, or soap production businesses in Joun, a town in Lebanon, could have several positive impacts on the town's economic development. Here are the key ways in which these industries could boost the local economy:

1. Job Creation and Employment Opportunities

- Direct Employment: Establishing wineries, olive oil factories, or soap production units would directly create jobs for local residents. Positions would range from agricultural workers, factory staff, and production managers to marketing, sales, and administrative roles.
- Indirect Employment: The development of such industries would create indirect employment in related sectors, such as logistics, packaging, transportation, retail, and tourism. For example, wineries could generate jobs in hospitality and tourism-related services.
- Agriculture-Based Employment: Wineries and olive oil factories would rely heavily on local agriculture, thus providing work for farmers, vineyard managers, olive growers, and seasonal laborers during harvest periods. This would create a steady income stream for people involved in agricultural production.

2. Development of Local Infrastructure

- Improved Transportation and Connectivity: Increased industrial activity would likely lead to improvements in local infrastructure, including better roads, transportation networks, and utility services to support the distribution of goods. This would enhance overall connectivity for Joun and improve access to regional markets.
- Energy and Water Systems: Investment in sustainable energy sources like solar power, water conservation systems, and improved irrigation techniques for vineyards and olive groves could lead to modernization and better infrastructure within the town, benefiting the entire community.

3. Promotion of Local Tourism

• Wine and Olive Oil Tourism: Wineries and olive oil factories could become tourist attractions, drawing visitors to Joun for vineyard tours, tastings, and cultural

experiences. This would create opportunities for local businesses such as restaurants, cafes, bed and breakfasts, and souvenir shops to thrive.

• Cultural Heritage Promotion: By promoting local products tied to Lebanon's rich cultural history, such as wine, olive oil, and soap, Joun can position itself as a hub of heritage tourism. Visitors attracted to these experiences would contribute to the local economy by spending on food, lodging, and cultural activities.

4. Stimulation of Local Businesses and Entrepreneurship

- Support for Small Businesses: The growth of industries in Joun could encourage the emergence of local businesses that cater to the needs of factories and tourists. For example, small packaging companies, artisan food producers, and local craftspeople could find new business opportunities.
- Entrepreneurial Opportunities: Local entrepreneurs may be inspired to start complementary businesses, such as organic farming, artisanal cheese production, boutique hotels, or specialty shops selling locally produced goods. This would diversify the town's economic base and reduce its reliance on traditional sectors.

5. Increased Export Opportunities

- Export of Local Products: The production of high-quality wines, olive oil, and olive oil-based soaps could open up opportunities for exporting these goods to international markets. By promoting Joun's local products abroad, businesses could bring foreign revenue into the town, strengthening the local economy.
- Brand Recognition for Joun: By developing high-quality, artisanal products, Joun could build a reputation as a center for premium goods, both nationally and internationally. This brand recognition would benefit local businesses by increasing demand and creating a sense of prestige around products from Joun.

6. Economic Diversification

- Reduced Dependence on Traditional Sectors: Historically, small Lebanese towns have relied heavily on agriculture or remittances. Establishing wineries, olive oil factories, or soap production facilities would diversify Joun's economy, making it more resilient to economic fluctuations in agriculture or global financial crises.
- Value-Added Agriculture: By processing local crops like grapes and olives into value-added products (wine and olive oil), Joun's economy could capture a larger share of the agricultural value chain, thus increasing income levels for local producers.

7. Training and Skill Development

- Skill Upgrading: The introduction of new industries would lead to skill development for the local workforce. Workers would acquire expertise in modern agricultural techniques, winemaking, oil extraction, and soap production, improving their employability.
- Youth Employment and Retention: Providing modern employment opportunities within Joun can help retain young people in the area, reducing brain drain and keeping local talent invested in the town's economic future.

8. Increased Government and Private Investment

- Public-Private Partnerships: Success in these industries could attract further government or private sector investments in infrastructure and business development in Joun. This may include better roads, utilities, and grants for expanding businesses, which would contribute to long-term economic growth.
- Foreign Direct Investment (FDI): The international success of Joun-based products, particularly wines and olive oils, could attract foreign investment in local industries, further boosting the town's economy and creating more jobs.

9. Environmental and Sustainable Development

- Sustainable Agriculture: With a focus on organic and sustainable practices, particularly in the wine and olive oil sectors, Joun could position itself as a model for environmentally friendly development. This would not only attract ecoconscious consumers and tourists but also ensure the long-term viability of the region's natural resources.
- Promotion of Eco-Tourism: The natural beauty of Joun, combined with sustainable agricultural practices, could promote eco-tourism, where visitors experience the natural environment while learning about environmentally friendly farming techniques.

Summary

The development of industries such as wineries, olive oil factories, and soap production in Joun can have a transformative impact on the town's economy. These sectors would generate employment, boost local infrastructure, promote tourism, stimulate entrepreneurship, and attract both local and international investment. By diversifying its economic base and focusing on high-value, artisanal products, Joun can position itself as a key player in Lebanon's growing wine, olive oil, and soap industries. The combination of economic growth, job creation, and cultural preservation could lead to a more prosperous and sustainable future for the town and its residents.













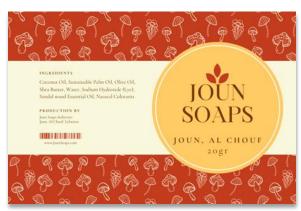












APPENDIX



EUROPEAN ECONOMIC CHAMBER OF TRADE, COMMERCE AND INDUSTRY EEIG

Central Office for European Standards and Guidelines
B-1040 Brüssel, rue Abbé Cuypers 3



EUROPEAN WINE QUALITY STANDARD (EuWQS)

Preamble

This **European Quality Standard** was elaborated by international experts and specialists of the European Economic Chamber of Trade, Commerce and Industry EEIG (Brussels) to avoid unfair competition, to protect consumer interest and to contribute to an improvement of the quality in this specific field.

The European Economic Chamber of Trade, Commerce and Industry has the copyright and all rights emanating from this intellectual property which can be only marketed according to contracts with the European Economic Chamber of Trade, Commerce and Industry by certified auditors.

General Remarks

Producers of wine the quality of which complies with the quality criteria as stipulated by the European Wine Quality Standard can be certified as certified quality wine producers and they can be entitled

to use the SEAL OF QUALITY of the European Economic Chamber of Trade, Commerce and Industry on their products, folders, price lists, letterheads etc.

General Requirements

The quality has to meet the analytic requirements. The visual (colour, clearness) and sensoric (smell, taste) assessment have to show excellent results.

Declaration and Labelling

Denomination, name and address of producer, alcohol contents in % vol., remaining sugar, contents of the bottle in metric system (1000 ml = 1 litre), region of origin, kind of grape, total content of natural acid, optimal temperature for consumption, serving proposals, and indication of vintage (year) only if at least 85 percent of the grapes originate from the vintage of this year.

Definitions

Wine, almost alcohol free = 0.5% vol. or less

Alcohol-reduced wine = more than 0.5% vol. but less than 5.0% vol.

Special Regulations

For "biological" etc. wines see relevant EU-guideline.

For "sparkling" wine see EG-Directive No. 1493/1999

Enrichment with Sugar and Alcohol

Special high quality wines" and "high quality wines" are not allowed to be enriched with sugar. To other categories not more than 15 grammes/litre sugar can be added.

Special high quality wines" and "high quality wines" are not allowed to be enriched with alcohol. To other categories alcohol can be added:

white and rosé wines:

red wine:

up to a maximum of 12,8% vol.

up to a maximum of 13,6% vol.

EUROPEAN WINE QUALITY STANDARD

(EuWQS)

To the European Economic Chamber EEIG, Central Office for European Standards and Guidelines

COMPANY/PARTNERSHIP/SOLE

Description

Check List

Special High Quality Wine

Vintage Bottles

- more than 19° KMW = 94,2° Oe
- more than 12,8% vol. alcohol
- more than 215 grammes/litre alcohol
- more than 102 grammes/litre sugar
- more than 12,4° Baumé
- more than 22,3° Brix
- more than 1,094 specific density
- less than 70 mg/l free sulphur dioxide
- less than 350 mg/l total sulphur dioxide
- more than 7 grammes/litre total content of natural acid
- all grapes originating from same region and same kind

High Quality Wine (Cabinet)

- more than 17° KMW = 83,3° Oe
- more than 11,1% vol. alcohol
- more than 88 grammes/litre alcohol
- more than 188 grammes/litre sugar
- more than 11,1° Baumé
- more than 20.0° Brix
- more than 1,083 specific density
- less than 55 mg/l free sulphur dioxide
- less than 260 mg/l total sulphur dioxide
- more than 6 grammes/litre total content of natural acid
- all grapes originating from same region and same kind

Quality Wine

- more than 15° KMW = 80,5° Oe
- more than 9,5% vol. alcohol
- more than 85 grammes/litre alcohol
- more than 181 grammes/litre sugar
- more than 10.7° Baumé
- more than 19.4° Brix
- more than 1,080 specific density
- less than 60 mg/l free sulphur dioxide
- less than 300 mg/l total sulphur dioxide
- more than 5 grammes/litre total content of natural acid
- all grapes originating from same region and same kind

Country Wine (vin ordinaire)

- more than 14° KMW = 67,2° Oe
- more than 8,7% vol. alcohol
- more than 70 grammes/litre alcohol
- more than 150 grammes/litre sugar
- more than 9,1° Baumé
- more than 16,3° Brix
- more than 1,067 specific density
- less than 50 mg/l free sulphur dioxide
- less than 210 mg/l total sulphur dioxide
- more than 4 grammes/litre total content of natural acid
- all grapes originating from same region and same kind

Table Wine (blend, cuvée)

- 14° KMW = 67,2° Oe or less
- 8,7% vol. alcohol or less
- 70 grammes/litre alcohol or less
- 150 grammes/litre sugar or less
- 9,1° Baumé or less
- 16.3° Brix or less
- 1,067 specific density or less
- less than 50 mg/l free sulphur dioxide
- less than 210 mg/l total sulphur dioxide
- 4 grammes/litre total content of natural acid or less
- origin of grapes and/or kind are not the same

Diabetic Wine (sugar reduced wine)

- less than 4 grammes/litre glucose
- less than 20 grammes/litre fermentable sugar
- less than 50 mg/l free sulphur dioxide
- less than 210 mg/l total sulphur dioxide

There should be a label indicating: "Suitable for diabetics – after consultation of the doctor" and an analysis indicating the contents of 1 litre of this wine (for instance): sugar unfermented (as invert sugar) from it:

Glucose

- 17,4 grammes
- 1,6 grammes

Fructose

• 15,8 grammes

Caloric value of the alcohol

- 3,009 kilo joules
- 702 kilo calories
- 3,674 kilo joules
- 858 kilo calories
- = total caloric value

BIBLIOGRAPHY

Source:www.winetourism.com
About Mount Lebanon
www.vinerra.com
The Chouf Region
en.wikipedia.org
Notable Wineries
www.lebanontraveler.com
Popular Wineries to Visit
www.tripadvisor.com
Cultural and Historical Significance
www.winetourism.com
Ensuring High Quality and Obtaining Certifications
www.wsetglobal.com
wineinstitute.org
european-economic-chamber-eeig.eu

Wine Regions in Lebanon

END OF THE DOCUMENT