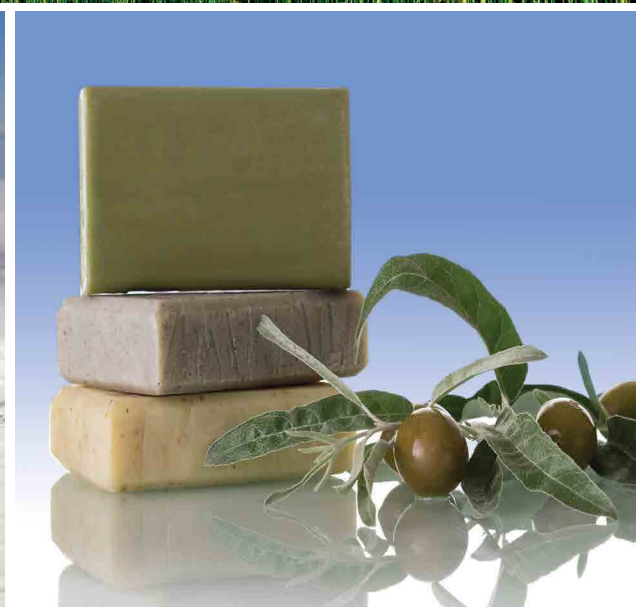




# National Green Export Review of Lebanon: Natural Soap and Ecotourism

# LEBANON



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## Contents

Abbreviations .....	iv
Acknowledgements .....	iv
<b>EXECUTIVE SUMMARY AND INTRODUCTION.....</b>	<b>v</b>
<b>SECTION 1. THE NATURAL SOAP SECTOR IN LEBANON .....</b>	<b>1</b>
1.1. History of natural soap making in Lebanon .....	1
1.2. Global trend and market characteristics .....	3
1.3. Barriers and opportunities for the development of the natural soap sector .....	4
1.4. National Plan of Action for the natural soap sector.....	6
<b>SECTION 2. THE ECOTOURISM SECTOR IN LEBANON.....</b>	<b>7</b>
2.1. Introduction .....	7
2.2. Ecotourism, a green industry enhancing environmental conservation and sustainable development.....	7
2.3. Ecotourism, a driving force to explore the hidden natural and cultural assets of Lebanon .....	8
2.4. Ecotourism's socio-economic benefits and contribution to the welfare of rural communities .....	8
2.5. Opportunities for the growth of ecotourism and sustainable development of rural areas and the emergence of value addition touristic products .....	8
2.6. Environmental threats to ecotourism expansion.....	10
2.7. National Action Plan for the Ecotourism (NAP) .....	10
References .....	13
Notes.....	14

## List of tables

Table 1. Core priorities identified for the development of the ecotourism sectors.....	11
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## List of boxes

Box 1. Extracts from interviews with soap sector stakeholders .....	5
Box 2. Empowering rural communities through ecotourism: the collaboration between Fair Trade and Tourism Lebanon and Vamos Todos .....	9

## Abbreviations

CCIAT	Chamber of Commerce, Industry, and Agriculture of Tripoli
EDL	Electricité du Liban (EDL)
EAHC	Ecotourism Ad Hoc Committee
FAO	Food and Agriculture Organization
FTL	Fair Trade Lebanon
FTTL	Fair Trade and Tourism Lebanon
GDP	Gross Development Product
IDAL	Investment Development Authority of Lebanon
IDRAC	Industrial and Research Alimentary Development
IRI	Industrial Research Institute
LAU	Lebanese American University
NAPE	National Action Plan for Ecotourism
MoA	Ministry of Agriculture
MoE	Ministry of Environment
MoET	Ministry of Economy and Trade
Mol	Ministry of Industry
MoSA	Ministry of Social Affairs
MoT	Ministry of Tourism
MSME	Micro, small and medium-sized enterprises
NGO	Non- Governmental Organization
QCC	Quality Control Centre
SMEs	Small and Medium-Sized Enterprises
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
WFTO	World Fair Trade Organization
WTTC	World Travel and Tourism Council

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## EXECUTIVE SUMMARY AND INTRODUCTION

This report presents the findings of the Lebanon National Green Export Review (NGER) conducted between 2016 and 2018 through a partnership between the Lebanese Government and UNCTAD. It analyses green production and export opportunities in the natural soap and ecotourism sectors and comprises national action plans to develop green exports in each sector. The report was prepared by a team of national experts with technical support provided by UNCTAD.

### *The natural soap sector*

Made from olive oil, Lebanese natural soap is free from harmful synthetic ingredients and known for its skin moisturizing properties. Various natural soap products are produced in Lebanon including bar soap, aromatic soaps, liquid soaps and skin care products.

Olives are a principal Lebanese agricultural product. Olive production covers more than 20 per cent of agricultural land in Lebanon and accounts for 7 per cent of the agricultural GDP generating 20,500 tons of olive oil annually for a total estimated value of \$70 million. 70 per cent of olive trees are used to produce olive oil while the remaining 30 per cent of trees are used to produce table olives. The Lebanese olive oil sector is well established and very competitive with around 544 registered oil mills in Lebanon and 110,000 olive farmers and growers.

Olive oil that is not of food quality is used to make soap thereby creating jobs and improving the income of local workers while contributing to the reduction of agricultural waste. The two main types of oil used for soap production are pomace oil, extracted the dregs of the olive paste, and olive oil unsuitable for consumption.

According to a survey conducted as part of the NGER, there are around 40 formal natural soap SMEs distributed in rural areas across the country, creating jobs and improving the income of the Lebanese and Syrian workers employed by these companies. Women-owned natural soap SMEs have grown in number at a rapid rate during the last decades. In certain regions, they produce natural soap in sufficient quantities needed to support workers' family income requirements (UNEP 2015). The survey also identified five large soap producers. Several large producers have created their own artisanal centres to attract tourists and local visitors.

### *National Action Plan for the natural soap sector*

The NGER identified the following strategic priority areas for the development of green production and export in the natural soap sector: marketing, packaging and labelling, coordination, cleaner production, capacity building, access to finance and regulatory environment.

The conclusions from the sector study were validated by national stakeholders during a workshop organized in Beirut in September 2018. At the workshop, industry and government representatives formulated and adopted three priority actions for the sector, namely to:

1. Support natural soap producers to comply with international standards.
2. Enhance the infrastructure of soap production.
3. Develop a specialized Micro, Small and Medium-Sized Enterprise (MSME) cluster for the soap industry.

### *The ecotourism sector*

The tourism sector has long been one of Lebanon's leading economic sectors, representing a major source of national income and employment. In 2016, tourism directly contributed to 7 per cent of national GDP (\$3.3 billion - LBP 4,983 billion). According to national statistics reported by the Investment Development Authority of Lebanon (IDAL) and analysis by the World Travel and Tourism Council (WTTC), the sector's total contribution to GDP was 19.4 per cent in 2016 (\$9.2 billion - LBP 13,830 billion), almost double the world average of 10.2 per cent (WTTC 2017). Overall, in 2016, Lebanon ranked 39th worldwide in terms

of the share of tourism's total contribution to GDP.

In terms of employment, tourism is among the top employers in Lebanon. The total contribution of tourism to employment (including employment from indirect and induced spending) was estimated to be 338,500 jobs in 2016 (over 18 per cent of total national employment).

Not only is tourism a major contributor to national income and employment, it is also one of the fastest growing sectors in Lebanon. With an average of 10.7 per cent annual growth in international tourist arrivals from 2013 to 2017, reaching an estimated level of 1.9 million in 2017 and the sector is expected to rise by up to 6 per cent annually over the next 10 years.

While precise figures are not available, it is clear that the vast majority of sectoral income accrues to service providers in the Beirut tourism market. Ecotourism is the main channel for expanding income generation from tourism to the wider national economy. According to the conclusions of the NGER, this can be achieved by attracting captive foreign visitors in Beirut to ecotourism sites; attracting tourists from foreign markets directly to ecotourism sites and increasing ecotourism site visits by domestic tourists. The sector study also pointed out the potential for product diversification, increased cooperation among value chain actors and development of value-added services. In supporting the development of ecotourism, careful planning and environmental impact assessments need to be undertaken in order to ensure that the future growth of the sector will take into account and mitigate the current threats on the Lebanon's ecosystems.

#### *The National Action Plan for Ecotourism*

The National Action Plan for Ecotourism (NAP) was prepared based on the analysis of the Lebanese ecotourism sector and its results are presented in this report. The NAP was formulated and adopted as a result of a national consultation organized in partnership with the Ministry of Tourism in 2018 and involving representatives from nature reserves, ecotourism tour operators, women's associations, artisans, SMSEs, academia and civil society.

Six strategic areas were identified to promote the development of the sector: environmental sustainability, development of ecotourism products, social inclusion, regulatory and institutional frameworks, marketing, and communications.

These strategic areas along with findings from the sectoral analysis were presented to national stakeholders during a validation workshop held Beirut in March 2018. As a result of the workshop stakeholders collectively agreed to prioritize three main actions, namely to:

1. Set up an enabling institutional and regulatory framework for ecotourism.
2. Increase the socioeconomic impact of ecotourism in rural communities through cross sectoral linkages and value addition enhancement.
3. Develop and implement communication campaigns to promote Ecotourism.

## SECTION 1. THE NATURAL SOAP SECTOR IN LEBANON

Olives and olive oil are a central part of Mediterranean food and diet. Thanks to its organoleptic qualities and health benefits, global olive oil consumption has grown by more than 57 per cent between 1996 and 2016 (IOC 2018). Consumer awareness of the health benefits of olive oil and the Mediterranean diet has spread globally. Olives and olive oil play an important role in the economic development of the rural areas in the Middle East (Xiong and al 2015) and are used in the food, cosmetic and pharmaceutical industries. In Lebanon, olive oil is the main input for the natural soap sector which offers significant employment and income opportunities in rural communities, including for women.

### 1.1. History of natural soap making in Lebanon

#### 1.1.1. Olive cultivation in Lebanon

Olive production covers more than 20 per cent of agriculture land in Lebanon and accounts for 7 per cent of agricultural GDP. Olive groves are grown and processed in all region of Lebanon but are mainly concentrated in the northern regions of the country.

Olive is amongst the most remarkable Lebanese signature agro-industrial products (IDAL 2017) and its exports have recorded a 19 per cent increase between 2014 and 2017 (5,944 tons in 2014 to 7,085 tons in 2017). 70 per cent of olive trees are destined for olive oil production while the remaining is used to produce table olives. The Lebanese olive oil industry is worth \$70 million, with an average annual production estimated to 20,500 tons. The olive oil market is very competitive with around 544 registered oil mills in Lebanon and 110,000 olive farmers and growers (USAID 2014). The majority of the olive mills (50 per cent) are located in the North, followed by South (25 per cent), Mount Lebanon (21 per cent) and Bekaa (4 per cent) regions (IDAL 2014). 350 to 450 of these mills are registered officially. 85 per cent of the registered mills are considered traditional, using a low productivity and labour intensive crushing and pressing production method. Only 10 to 15 per cent of registered mills are automatic or semi-automatic, relying on a horizontal decanter (2 or 3 phases) for oil separation (MoET 2006).

#### 1.1.2. Types of olive oil produced in Lebanon

Several types of olive oil are produced in Lebanon. The Lebanese Standards Institution, Libnor, classifies olive oil according to norm NL 756 (2007) as:

1. Olive oil: this class comprises virgin olive oil. This oil is obtained from the fruit of the olive tree solely by mechanical extraction and has not undergone any treatment other than washing, decantation, centrifugation, filtration. Some of the oil produced in this way is not suitable for human consumption and is used to produce soap.
2. Pomace<sup>1</sup> oil: this comes from the dregs of the olive paste – as the last drops of oil is extracted from the skins, pits and ground flesh of the olives. This oil doesn't have the flavour of a virgin olive oil, so it is mostly relegated to soap making use.

It is worth mentioning that olive oil which is expired or unsuitable for consumption can be easily transformed into high-quality soap for domestic use and sale.

The latest figures from the MoET office show that in 2017 Lebanon exported 7,703 tons of olive oil for a total value of \$24.3 million. Major export markets included United States of America, Kuwait, United Arab Emirates, Saudi Arabia, Canada, Iraq, Australia and Sudan.

#### 1.1.3. Socioeconomic aspects of soap production

Created in 1993, the Crafts Department of the Lebanese Ministry of Social Affairs (MoSA) monitors social impacts of artisanal soap production. Despite it's efforts there is a scarcity of in-depth information and studies on the sector.

According to the survey conducted for the preparation the present study, about 40 formal SMEs distributed in rural areas across the country are involved in olive oil soap production. The number of SMEs is significantly higher when informal SMEs are included. Soap production contributes to job and income creation in favor of both Lebanese and Syrian citizens. It also has a significant impact on women's employment as the number of women-owned SMEs operating in the sector has grown at a rapid rate during recent decades. In certain regions, widows survive on making natural soap which is sold for \$10 per tank (UNEP 2015).

There are five large soap producers in Lebanon. Some of them have created their own artisanal centres to attract tourists and local visitors. These centres allow visitors to:

- appreciate and enjoy visits of the soap production centres as stops on a touristic trail;
- get acquainted with the natural soap production process that involves the use of non-automated tools; and
- buy soap products as well as other extra products made from olive oil such as (oils, body lotion, perfume, etc.).

Such efforts have contributed to the growth of the sector and to the development of linkages between soap production and ecotourism (see section 2 on ecotourism).

#### 1.1.4. Natural soap benefits

Since ancient times olive oil has been known as a remedy for hair and skin ailments and deficiencies (Preedy V. and Watson R., 2010), Its antioxidant properties and vitamin E content are renowned for nourishing, cleansing, moisturizing and protecting the skin against the signs of aging and environmental damages. Natural soap made with a base of olive oil is free from any harmful artificial or synthetic ingredients found in mainstream commercial soap bars and liquids. It is an excellent moisturizer that helps to replenish the skin's natural oils and provide balance and lasting protection for all skin types.

#### 1.1.5. Production process

Soaps are the sodium or potassium salts of stearic acids or any other fatty acids. They are prepared by the saponification process, which involves reacting triglycerides (the oil) with caustic soda (NaOH). Different oils with different composition of fatty acids and different properties can be used to prepare a soap such as olive, castor, neem, and coconut ... etc. The ratio of these oils, their types, and their quality, as well as the type of caustic soda and water, can affect the cleansing and lathering properties of the produced

complete before the soap goes into the mold. Colours, additives, scent are added just before the molding. Once molded, the soap is ready to use. However, a few weeks of curing improves its durability.

According to producers, the advantage of the cold process is that it retains vitamin E and glycerin in the soap which helps to moisturize the skin.

In both cases, the soap should contain a minimum of 60 per cent of olive oil to be designated as olive oil soap according to the Libnor NL 220 (2000). Generally, virgin and extra virgin olive oil are used in both cold and hot processes. However, in some cases, pomace oil (which is cheaper than olive oil) is used in the hot process to lower production costs.

#### 1.1.6. Environmental impacts of natural soap production.

Olive oil extraction is a highly water consuming process. Traditional mills consume up to 3 times more water than modern 3 phase mills and contribute for 99 per cent of all phenol effluent discharge in Lebanon. If not adequately managed, olive oil production can be an important source of pollution. Olive mill wastewater (OMW), known in Lebanon as "Zibar", and a solid residue, known as "jift", are the 2 main by-products generated by olive oil extraction. Olive oil, OMW and solid residues account respectively for 50 per cent, 20 per cent and 30 per cent of the total output of the extraction process. Close to 75 per cent of olive mills in Lebanon discharge OMW directly in the environment. Only 17 per cent the country's mills discharge OMW into the municipal sewer, and the remaining 8 per cent use it for irrigation purposes.

OMW is known as a major pollutant to surface and groundwater in the Mediterranean basin and is one of the least biodegradable natural compounds. Its high polytoxic phenol content, coloured organic substances

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