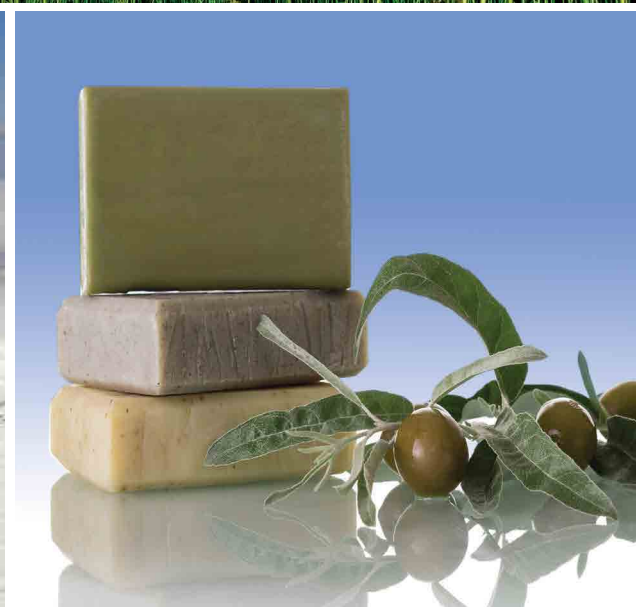




# National Green Export Review of Lebanon: Natural Soap and Ecotourism

# 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 soaps.

Two methods are adopted in soap making in Lebanon: the hot and the cold processes.

During the **cold process**, oil and distilled water/lye are combined and thoroughly mixed to create a raw soap mixture. Colours and scents are then incorporated and the mixture which is then poured into a mold. The saponification process takes place in the mold with 4 to 6 weeks of curing being required before the soap can be extracted from the mold and used.

The **hot process** involves heating the raw soap mixture and forcing the saponification process to

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 and high organic matter concentration make it toxic to plants and microorganisms (Hashwa and Mhanna 2010). Each component of the OMW is bound to have a negative and serious impact if disposed in the environment without any treatment. Such impacts are not confined to water, as some phytotoxic effects were also observed in soil quality and plant growth. In addition to antimicrobial activity, OMW is associated with the inhibition of seed germination, phytotoxicity to herbage crops and the production of stale odour in soils where it is disposed. The Hasbani River, located in the South of Lebanon, is one example of a Lebanese river located near olive orchards and subject to high levels



of acidity attributable to OMW effluent discharges into the river during harvest season (Hashwa and Mhanna 2010). A large share of OMW pollution is generated by small businesses who cannot afford the cost of treatment.

In total, the cost of environmental degradation from the olive oil production sector is about \$13.27 million/season including damages to fish population, domestic water quality and landscape (UNDP 2012). Integrated waste management studies for the olive oil pressing industries in Lebanon, the Syrian Arab Republic and Jordan reveals the best environmental practices in olive mill waste management and new technologies in the region. These include cleaner production alternatives such as cleaning technology, production processes control, materials reuse and good housekeeping. A recent project which introduced cleaner production to 10 mills selected across Lebanon, illustrated how olive oil production wastes can be used as biomass fuel, compost or as starting materials to obtain valuable products such as antioxidants, enzymes and biogas fuel (MoE, 2007). More recently, the National Green Export Review of Morocco highlighted the potential for sustainable use of olive oil production by-products (UNCTAD 2017).

Natural soap is entirely made from natural ingredients. It is a completely biodegradable vegetable-based product and its use does not lead to release of toxic products. It is eco-friendly and safe for the environment. However, in Lebanon indirect pollution may be generated in the form of CO<sub>2</sub> emissions associated with soap production, as backup generators are sometimes used to produce electricity for the hot process (see 1.5).

## 1.2. Global trend and market characteristics

### 1.2.1. Commercial vs artisanal-handmade production

**Natural/artisanal soap producers** are usually family businesses. Using labour-intensive methods, they produce small batches of high-quality soap using olive oil (with a minimum of 60 per cent of virgin olive oil) and other natural products (oils, cremes, etc.). In some cases, artisanal soap production remains a part-time work to generate extra income. The size of production units vary as follows:

- Small to Medium sized units and start-ups produce between 200 to 500 kg of soap per month and

employ an average of 5 workers. They operate on a part-time basis and use traditional and basic equipment such as cooking utensils for mixing, cutting, moulding and stamping. They cool soaps on terraces and balconies and usually sell their products on the local market.

- Large size units produce up to 10 to 40 tons per year. They use automated equipment for boiling, mixing, cutting, moulding and stamping. They have cooling units and, in some cases, own laboratories and conduct research and development activities.

**Commercial soap producers**, with a total output of up to 20 tons per month, are the direct competitors of natural soap producers. They produce soap and other cosmetic products using coconut oil, palm oil and olive oil (with a lower content than natural soap producers) and artificial additives. They employ 50 people or more.

### 1.2.2. Performance and recent developments in the sector and trade

#### The craft department at the MoSA

Since 2014, the Craft Department at the MoSA has been organising soap production training workshops for small and medium sized soap producers. More than 20 training workshops organised from the South to North were conducted and around 1,000 participants were trained. The Craft Department is also preparing a feasibility study on opportunities to expand the olive oil natural soap industry.

#### Quality Control Centre of the Chamber of Commerce, Industry, and Agriculture of Tripoli

The Quality Control Centre (QCC) of the Chamber of Commerce, Industry, and Agriculture of Tripoli (CCIAT) created a centre for Industrial Development and Research (IDRAC) which provides technical advice and tools to startups and SMEs in order to enhance their natural soap production.

#### United Nations Industrial Development Organization and Ministry of Industry

Recently UNIDO in coordination with the Ministry of Industry (MoI) in Lebanon has implemented an initiative to create a more sustainable and better life for families and communities in remote rural areas and/or underprivileged backgrounds. One component of this project has supported four traditional soap producers to improve their competitiveness in the international market in three lines of products: traditional recipes

soap, natural soap and contemporary soap.

- The project supported more than 25 soap producers (highly skilled, medium level and startups) to improve their technical skills in cold process soap making. by providing technical expertise to train them.
- Training was also provided on market trends and analyses of products in high demand.

Natural soap producers have developed a broad range of value-added products from 100 per cent pure natural soap to skin care products. This diversity of products can allow them to access multiple niche markets. Below is a description of some promising product diversification examples from the Lebanese soap industry.

#### **Pure (100 per cent) natural soap**

These soaps made by using virgin or pomace oils and have a very high proportion of olive oil. No colorants, scents or additives are added during the production process.

#### **Natural soap with essential oils/aromatic plants/herbs/spices/honey etc.**

Several natural additives or substances can be added during the natural soap production process. This includes but not limited to:

- Carrot puree or juice, citrus peel, ground, grapefruits, cactus.
- Spices and seeds such as: chocolate, cinnamon powder, cloves, cocoa powder, coconut shredded, coffee grounded, Shia seeds, fennel flower, black seeds, musk, nutmeg, black cumin.
- Flowers and medicinal and aromatic plants such as chamomile, rosemary, lavender, cornflowers, Aloe Vera, rose, olive, oud, turmeric, cedar wood, jasmine rose.
- Honey and beeswax.
- Milk powders such as goat milk, whole milk powder, almond milk.
- Essential oils such as lemongrass, lavender, rosemary, peppermint, argan, rosemary, clary sage, orange, tea tree, laurel, Gardenia, Ambre, almond, lemon blossom, jasmine oil.
- Alum, clay.
- Butters such as shea and coconut.
- Gold dust and diamond.<sup>2</sup>

A soap can contain one or a combination of natural substances that contain Vitamin A and C, minerals and antioxidants that benefit the skin.

#### **Transparent soap**

Also known as glycerine soap are soap produced using a solvent (such as glycerine, sugar and alcohol) to dissolve the soap crystals and create transparency.

#### **Olive oil liquid soap**

All liquid soaps are made using potassium hydroxide rather than sodium hydroxide which is used to make solid soap bars. The liquid form is used to make shower gel and hand wash gels. Liquid soap can also be incorporated into household cleaning products (floor cleaner, laundry detergents and dish soap).

#### **Olive oil skin care products**

Such products include olive oil soaps, lotions, body balms, face wash, face moisturizer, face scrubs and hair shampoo.

#### **Handmade olive oil soaps**

Soaps are designed in different shapes and colour for different events: birthday, wedding, birth, Christmas and New Year, Valentine's Day, Mother's Day, Easter, Halloween. etc. Specialty products can also be customised to meet consumers' needs.

### **1.3. Barriers and opportunities for the development of the natural soap sector**

The following opportunities and barriers to the development of the Lebanese natural soap sector build on the results from the sector survey and on consultations conducted with national stakeholders undertaken as a part of the NGER in 2018. They formed the base for the elaboration of the national action plan for natural soaps elaborated by stakeholders. Box 1 highlights two major concerns voiced by stakeholders.

#### **1.3.1. Opportunities**

##### **Good reputation**

The natural soap sector benefits from its reputation for quality in regional and international markets. Lebanon exports natural soap products to European countries, Australia, United States and the Gulf Region. Soap producers benefit from festive seasons to expose their high-quality products to tourists (see section 2).

##### **Creativity and innovation**

The artisanal sector in Lebanese villages is driven by creativity and innovation. Local craftsmen have been using handmade lace wrappings or wooden

### Box 1: Extracts from interviews with soap sector stakeholders

#### Interview with natural soap experts

*“Lebanese soap producers lack certification with European Union and Libnor standards. They also lack traceability tests for olive oil, essential oils and used soda. Another problem occurring during the soap production process is that the coefficient of saponification changes with the type of olive used making their product slightly variable<sup>5</sup>”.*

#### Interview with soap producers from a Lebanese SME

*“Conformity tests are very expensive; we are struggling to buy essential oil and get certificates from the main suppliers as they only provide traceability certificates for large purchases of raw materials” (above 1 ton).*

containers to package natural soap and increase its value while better marketing their products.

#### The shift toward healthy products

The current increase in the demand for healthy and sustainable products, including natural cosmetics and personal care products results in enhanced market opportunities for Lebanese natural soap in domestic and export markets.

#### Lebanese soap products catch the interest of guests and tourists

Although artisanal soaps remain expensive for the local market, many soap producers are succeeding in selling small soap bars and souvenir items made from soaps to city hotels and hospitality businesses in many villages. According to the survey conducted among natural soap producers, only 20 per cent of the national production of natural soap is sold on the local market.

#### 1.3.2. Barriers

##### Traceability and conformity to Libnor and European Union standards

Compliance with requirements of both Lebanese Standards (Libnor 220/2000<sup>3</sup>) and European standards (CE 1223/2009<sup>4</sup>) is proving difficult for small producers who lack the financial resources needed to ensure the chemical analysis and physical testing of their products. Many also lack logistical resources needed to ensure a required level of traceability throughout the storage, distribution and transportation operations. Increased collaboration with existing testing facilities such as the Industrial Research Institute (IRI) and the QCC of the CCIAT could improve their access to quality control.

#### Packaging and labelling

Packaging must be appealing and efficient in order to attract consumers' attention. Labelling is also important feature as there is a lower demand for products with no quality certifications. Moreover, voluntary social and environmental certifications (e.g. organic, fair trade) are increasingly needed to access export markets for value added green products.

So far, only large producers are able to sell their production with proper labelling and product specifications required in international markets.

#### Financing

SMEs are less likely to obtain bank loans than large companies. They rely on their own capital, or capital from relatives to launch their product. Despite efforts by Banque du Liban to strengthen SMEs and start-up businesses, all the surveyed producers were uncertain regarding their ability to secure loans.

#### Lack of comprehensive institutional support

There is no coordinated action in the natural soap sector. Producers mainly rely on the Craft Department of the MoSA for marketing related assistance and on the Ministry of Agriculture (MoA) for Olive oil production. Cooperation between SMEs in the sector is absent.

#### High cost of production and regional competition

Soap producers are facing high water and electricity costs which weakens the price competitiveness of their production. They also face strong competition in the local market from low-cost soap products that are produced in the Syrian Arab Republic.

## 1.4. National plan of Action 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:

- Development of a marketing strategy for both domestic and export markets.
- Packaging and labelling improvements.
- Reinforcing coordination within the sector and with external stakeholders; in particular with ecotourism actors.
- Mainstreaming cleaner production practices.
- Capacity building and training.
- Access to finance.
- Creating an enabling regulatory framework.

These conclusions along with the findings from the present sector study were validated by national stakeholders during a workshop organized in Beirut in September 2018 in partnership with the MoET. The workshop led to the formulation and adoption of the below action plan by industry and government representatives.

### *Action 1: Supporting natural soap producers to comply with international standards*

#### **Related Activities**

- Provide SMEs with certified essential oils to meet European Union norms;
- Develop and conduct training on European Union import requirements;
- Organise experience sharing events with large producers;
- Develop and conduct a training on labelling, packaging and branding to better market soap products;
- Conduct a study on market opportunities in the European Union;
- Develop and conduct a training on market access, certification and quality system management (ISO 22005 tractability standard).

### *Action 2: Enhancing the infrastructure of soap production*

#### **Related Activities**

- Identify technical opportunities to generate economies of scale while reducing water and electricity consumption;
- Support SMEs in securing loans for the purchase of eco-efficient equipment.

### *Action 3: Developing a specialized MSME cluster for the soap industry*

## SECTION 2. THE ECOTOURISM SECTOR IN LEBANON

### 2.1. Introduction

The tourism sector has long been one of Lebanon's leading economic sectors, representing a major source of national income and employment. Tourism's **direct contribution** to GDP is the GDP generated by industries that deal directly with tourists. It is the sum of all spending by foreign and domestic tourists on tourism and related travel services. It includes spending by tourists on hotels, travel agents, airlines and other passenger transport services, restaurants and leisure industries. Tourism directly contributes to 7 per cent of national GDP in 2016 (\$3.3 billion - LBP 4,983 billion).

However, the **total contribution** of tourism to the national economy is even greater if tourism's indirect contributions (investment and spending by tourism service suppliers and government spending on tourism infrastructure) and induced contributions (consumption spending by tourism service employees) are accounted for. 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 (income generated directly by the tourism sector plus its indirect and induced income) 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. It supported 124,000 direct jobs in 2016 (7 per cent of total employment). 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, the sector continues to experience

significant income growth. WTTC analysis projects tourism exports (spending by international tourists) to rise by up to 6 per cent annually over the next 10 years.

Increased spending by domestic tourists will further increase total sector income. In 2016, foreign tourist spending accounted for 86 per cent, and domestic tourist spending 14 per cent, of total tourism income. In terms of tourism products, leisure tourism generated 90 per cent, and business tourism 10 per cent, of income in 2016.

Although figures are not available, it is clear that the vast majority of sectoral income accrues to service providers in the Beirut market. **Ecotourism is the main channel for expanding income generation from tourism to the wider national economy.** This can be achieved by attracting captive foreign visitors in Beirut to ecotourism sites (exports); attracting tourists from foreign markets directly to ecotourism sites, with or without a Beirut vacation component (exports); and increasing ecotourism site visits by domestic tourists (increased domestic income generation).

This Lebanon NGER Report looks into the options for expanding the ecotourism market in Lebanon in an environmentally and socially sustainable way. Improving the performance and efficiency of every aspect of ecotourism services is considered in detail; new ecotourism products are explored; ways to overcome market constraints are proposed and opportunities for increased cooperation and coordination among ecotourism related service providers are considered. Finally, a National Action Plan for Ecotourism (NAP), adopted by national stakeholders as a result of the NGER process, is presented.

### 2.2. Ecotourism, a green industry enhancing environmental conservation and sustainable development

In a global context marked by an increased awareness of the threats posed by environmental degradation and a steady growth of green markets, "Ecotourism" has emerged as a responsible form of tourism reliant upon a preserved environment. Ecotourism is built on guidelines and criteria that seek to reduce environmental impact while improving tourism's contribution to sustainable development and the preservation of cultural resources. Ecotourism also aims to safeguard the interests of local communities

and ameliorate their livelihood and social conditions.

One of the main objectives of ecotourism in Lebanon is to attract tourists who would like to learn about the natural and cultural characteristics of the country and support the conservation of its ecosystems and traditions. Ecotourism seeks to minimize the consumption of non-renewable resources and prevent all forms of pollution. It also provides greater interaction with local communities and allows visitors to experience and share local life and culture.

Ecotourism development mainly depends on attractions and activities related to the natural environment, historic heritage and local traditions. The ability to preserve these resources will directly impact the potential to develop ecotourism activities. By helping to justify and pay for conservation of an area's natural and cultural resources, ecotourism therefore represents an important means of achieving conservation in areas with otherwise limited resources. Ecotourism can thus be considered to contribute to the realisation of three primary objectives: sustainability, conservation and empowerment of local communities.

### **2.3. Ecotourism, a driving force to explore the hidden natural and cultural assets of Lebanon**

Lebanon has lately observed, after years of political turmoil, an emerging interest in nature-based tourism and witnessed considerable growth in eco-activities. Private associations and non-governmental organizations have largely contributed to this development. The Ministry of Tourism has also played a positive role by supporting local municipalities and donor agencies in promoting ecotourism projects in rural areas and remote villages.

Some of the principal summer season ecotourism activities currently practiced in the country include hiking and trekking, mountain trails hiking, horseback riding, paragliding, kayaking, canoeing and rafting, bird watching, caving and speleology, cycling and mountain biking, rock climbing, rappelling, archery and camping. Additionally, Lebanon's Mediterranean coastline is dotted with beautiful and historic port cities, seaside resorts and beaches offering great opportunities for water sports such as diving and snorkelling, windsurfing, water skiing, boating, fishing and sailing expeditions. Winter season ecotourism is also offered as Lebanon's snow-capped mountains are home to ski resorts and natural areas offering

activities such as cross-country skiing, snowshoeing, snow kiting and winter hiking. All of the prementioned activities are often linked to agritourism, wine tourism and religious and archaeological site tourism.

Due to its location on the Eastern Mediterranean, its diversified topography and seasonal climatic variations; Lebanon holds significant potential for the development of rural tourism. Rural tourism in Lebanon has countless variants and encompasses large segments of rural life such as agrotourism, wine tourism, gastronomic tourism, rural crafts, village festivals, religious processions, cultural trails and community-assistance programs. Lebanon boasts a strong reputation as well for its cuisine, organic produces and preserves, which contribute enriching visitor experiences.

### **2.4. Ecotourism's socio-economic benefits and contribution to the welfare of rural communities**

Lebanon's ecological attributes and potential for the development of a broad array of ecotourism activities can contribute to create employment in rural areas and generate substantial revenues for local communities. Possible employment creation areas include among others accommodation and rural lodgings, guesthouses, camping sites, small grocery outlets and restaurants. Ecotourism can generate economic opportunities for micro entrepreneurs such as local guides, craftsmen, food producers and farmers. Consultations conducted during the preparation of the present study have shown that the extent to which these activities will benefit local communities depends on the level of coordination and linkages established within the tourism value chain.

Rural tourism empowers local communities and improves social integration, allowing youth and women to become more involved in the social and economic life of their community. It constitutes an incentive for locals to conserve their local heritage and environment and creates a sense of pride in their local accomplishments.

### **2.5. Opportunities for the growth of ecotourism and sustainable development of rural areas and the emergence of value addition touristic products**

## Box 2. Empowering rural communities through ecotourism: the collaboration between Fair Trade and Tourism Lebanon and Vamos Todos

Fair Trade and Tourism Lebanon (FTTL) supports small producers, food-processing cooperatives and small-scale family businesses, located in the disadvantaged and remote areas of Lebanon. Its main objectives are to:

- Promote Fair Trade values and rural Lebanese regions
- Create a dynamic to push for the development of the local economy
- Discover typical and regional food specialties and know-how
- Discover the history and traditions of villages within the Lebanese Fair Trade Network
- Assist the producer organizations to improve their production and prepare their deliveries
- Identify development partners in Lebanon and at the international level.

Aside from the development of markets and outlets for the cooperatives' products, FTL works with its members on organic and Fair Trade certification dynamics in the area of technical capacity-building and strives to ensure high-quality products through standardization.

As part of the work of the Lebanese Ecotourism Ad Hoc Committee (EAHC), instituted as a result of the NGER, FTL concluded a cooperation agreement with Vamos Todos, one of the most active ecotour operators in Lebanon. The agreement will see Vamos Todos intensify the frequency of ecotours to the cooperatives and villages within the Lebanese Fair Trade Network, regularly organize joint events with FTL and promote Fair Trade products through its activities. Such a symbiotic initiative will contribute to valorize the Lebanese culinary heritage and food-crop production, offer a sustainable economic model for marginalized farmers and women cooperatives in rural regions. It constitutes a genuine example of the mutually reinforcing linkages between ecotourism and other economic activities in rural areas.

Product and service diversification is at the heart of national efforts to develop the ecotourism sector and improve its socioeconomic impact. The following tourism products and cultural events hold significant potential to attract visitors and generate additional economic opportunities for local communities.

### Olive oil and soap trade

Olive groves and olive production are at the heart of the economic life in some rural areas of the country. A number of high-quality products (oil, soap, creams) made from olives can be sold to visitors who can as well visit olive groves, traditional oil mills and artisanal soap factories. Soap exports make up a substantial proportion of the market for Lebanese producers.

### Winemaking

Lebanese wine production has experienced significant growth boosted by strong demand in domestic and export markets. The number of wineries is permanently increasing and wine tourism has recorded continuous development of its offerings. Ecotourism related activities offered by wineries primarily consist in wine tasting visits. Several wineries include wine museums, restaurants and gift shops selling exclusive products and souvenirs.

### Festivals

Rural festivals play an important role in the life of many Lebanese villages. Held throughout the country, particularly in summer, they provide an opportunity to discover local culture, experience typical food, music and interact with local communities. The Ministry of Tourism is currently engaged in promoting such events.

### Traditional crafts

Fuelled by a growing demand, the traditional craft industry is gradually reviving. Various regions specialize in typical handicraft, traditionally produced from sustainably sourced local materials. Such products include among others pottery, cutlery, glassware, silk work and embroideries.

### Cultural and rural trails

Cultural and rural trails were set up to attract visitors into rural areas rich in archaeological sites, picturesque landscapes and offering a variety of agricultural and agro-food products.

### Food products

The production and sale of agro-food products,

such as dairy, organic fruit and vegetable preserves, honey and traditional sweets can be an important source of income for farmers and rural communities. This enables them to diversify and add value to their production and keep their farms profitable.

#### **Natural spring mineral waters**

Natural spring mineral waters are a national pride in Lebanon. They are particularly appreciated by neighbouring countries and can contribute to the development of thermal cures and spas. Trademarks such as Sohat, Tannourine, Sannine and Rim already enjoy a regional or international recognition.

## **2.6. Environmental threats to ecotourism expansion**

Stakeholder consultations conducted during the preparation of the NGER concluded that the ecotourism market potential has not been fully explored. Due to a lack of advertising capacity and weak business linkages, many ecotourism services available in rural areas still remain invisible to consumers and even to tour operators and travel agents. Nevertheless, as the number of visitors is expected to grow in the coming years, the following threats to Lebanon's ecosystems should be considered in planning the development of future touristic activities.

#### **Habitat loss, fragmentation and destruction**

Lebanon's terrestrial ecosystems suffer from constant fauna and flora habitat loss, fragmentation and destruction, sometimes with no possibility for regeneration. This is due to insufficiently enforced zoning regulations for construction, amplified demographic pressure, absence of adequate planning, non-compliance with environmental regulations and real estate speculation. Forest fires and illegal logging to produce charcoal wood are other drivers of habitat loss. They constitute a major threat for the vegetation cover as forests are often totally harvested even on very steep slopes. Declining forests are also threatened by overgrazing which can inhibit regeneration. Recreational tourist activities, such as motorized vehicle usage, irresponsible hunting and camping can also contribute to deforestation.

Quarrying is another important factor of habitat loss, fragmentation and destruction as it accelerates the erosion process and subsequent destruction of existing arable lands, modify existing ecosystems, change landscape patterns and destroys natural

habitats. Habitat loss and landscape distortion are also caused by coastal sand extraction.

Non-regulated leisure and tourism activities can pose a significant threat to rural and coastal ecosystems. A comprehensive strategy to manage tourism development, the enforcement of construction regulations and the generalisation of environmental impact assessments can help ensure the sustainability of the sector.

#### **Unsustainable exploitation of natural resources**

Unsustainable exploitation of natural resources often takes the form of unsustainable hunting practices or illegal harvesting of trees and non-timber forest products for local consumption and export. Moreover, driven by the population growth the pressure on ground water for irrigation purposes is becoming more and more accentuated, putting freshwater resources at risk.

#### **Pollution and climate change**

Pollution sources encompass the discharge of untreated municipal wastewater due to the lack of treatment plants in the absence of adequate policies; the discharge of untreated industrial effluents; the improper solid waste disposal through the creation of open uncontrolled dumps; the excessive quantities of pesticides fertilizers and agrochemicals used in the agricultural sector, the healthcare wastes that are usually discharged into the environment with no prior control or treatment; and the gas emissions from industries, incineration processes, vehicles, machinery and heavy transportation. This issue, combined with very limited renewable energy sources, highlights the importance of careful planning to mitigate the tourism industry's carbon footprint. The threat posed by climate change also underlines the need for a coordinated effort in the area of climate adaptation in order to ensure the sustainability of Lebanon's touristic assets.

## **2.7. National Action Plan for the Ecotourism (NAP)**

The National Action Plan for Ecotourism (NAP) was prepared based on the analysis of the Lebanese ecotourism sector. It was formulated and adopted as a result of a national consultation organized in partnership with the Ministry of Tourism in 2018, involving representatives of nature reserves,



**Table 1. Core priorities identified for the development of the ecotourism sectors**

Objective	Area of action
Preserve the natural, historical and cultural heritage of rural areas and enhance policies that promote sustainable tourism practices.	Environmental sustainability
Promote the community-based approach for conservation (Hima), in collaboration with municipalities and local authorities.	
Improve the visitor experience, the appeal of rural destinations and the quality of ecotourism products and services.	Development of ecotourism products
Increase tourism expenditures and enhance the socio-economic welfare of local communities.	Social inclusion
Develop a regulatory/institutional framework for the ecotourism sector to promote cooperation among rural tourism stakeholders and enforce laws across the value-chain.	Regulatory and institutional framework
Initiate customized promotion and communication strategies for ecotourism development in the domestic and diaspora markets.	Marketing and communication

ecotourism tour operators, women's associations, artisans, SMEs, academia and civil society.

The study of the ecotourism sector led to the identification of 6 strategic areas (see Table 1) to advance environmental sustainability, support the development of ecotourism products, promote social inclusion, develop a conducive regulatory and institutional environment and improve the promotion of the sector.

These strategic areas along with the findings from the sectoral analysis were presented to national stakeholders during a validation workshop held on 6 and 7 March 2018 in Beirut. Following comprehensive discussions, stakeholders collectively agreed to adopt the National Action Plan for Ecotourism (NAP). Comprising 3 priority actions each linked to subsidiary activities, the NAP will be implemented with support from the Ecotourism Ad Hoc Committee (EAHC) which was also set up during the validation workshop. Comprising several sectoral actors, the EAHC was already instrumental in fostering collaboration among ecotourism actors (see box 2).

#### **Action 1: Setting up an enabling institutional and regulatory framework for Ecotourism**

##### **Related activities**

- Devise a framework of national standards for ecotourism sector, advocating institutional support.
- Regulate the work of eco-tour operators and their licensing requirements, legalizing their status.
- Regulate the responsibilities of local tour guides and their scope of action, prioritizing vocational training.
- Legalize the work of rural accommodations and devise a classification system for guesthouses and eco-lodges according to their location, amenities,

services and rating policy.

- Devise a national labelling scheme based on environmental performance and stakeholders' compliance with responsible tourism principles.

#### **Action 2: Increasing the socioeconomic impact of Ecotourism in rural communities through cross sectoral linkages and value addition enhancement**

##### **Related activities**

- Encourage visitors to enjoy the beauty of natural landscapes and undisturbed environments, interact with local communities and share numerous variants of ecotourism activities while contributing to the economic and social regeneration of rural areas, the conservation of nature and the preservation of local culture.
- Strengthen linkages between ecotourism and related rural businesses.
- Strengthen value-added chains in the agro-food and handicrafts industry and promote fair trade and direct access to markets for farmers, agro-food producers and craftsmen.

#### **Action 3: Developing and implementing communication campaigns to promote Ecotourism**

##### **Related activities**

- Enhance linkages with local and international media for targeted promotional campaigns.
- Encourage and facilitate ecotourists' use of information technology through e-promotion, mobile applications, social media and GPS location services.
- Develop partnerships with international ecotourism societies, diaspora networks and foreign embassies.

- Create online platforms for different ecotourism sites to publish promotional news items.
  - Promote the culture of ecotourism and raise environmental awareness within schools, universities and religious communities.
  - Promote the Hima community-based approach for environmental conservation and cultural sites preservation with municipalities and local authorities
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## Notes

- 1 The solid residue containing the pulp of olive, the stone and the tegument.
  - 2 <http://glamroz.com/most-expensive-soap-in-the-world-is-made-in-lebanon/>.
  - 3 Règlement (CE) No 1223/2009 du Parlement Européen et du Conseil, Journal officiel de l'Union européenne.
  - 4 NL 220 (2000), Lebanese standards for olive oil soap, Libnor.
  - 5 Personal communication of Alban and Alain Dougnac, soap experts at Nature et Limousin.
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