



Emergence of the first trail network from the Mediterranean  
 “Sectoral Diagnosis on the Lebanon Mountain Trail”  
 Consolidated Report



Prepared by

Jad Abou Arrage, PhD (Tourism Expert)

Jean Stephan, PhD (Environment Expert)

Maroun Khreich, PhD (Cultural Heritage Expert)

Salim Roukoz (GIS Expert)

July 2024

## TABLE OF CONTENTS

Acronyms .....	ii
List of Figures .....	iv
List of Tables .....	v
Executive Summary .....	1
I. INTRODUCTION AND METHODOLOGY .....	2
II. OVERVIEW OF THE LEBANON MOUNTAIN TRAIL .....	3
III. Diagnosis by Sector and Region .....	5
III.1 Rural Tourism .....	5
III.1.1 Rural Tourism in Lebanon: Evolution and Challenges .....	5
III.1.2 Rural Tourism in Lebanon: Market Dynamics .....	7
III.1.3 The Rural Tourism Value Chain and Stakeholders Mapping .....	8
III.1.4 LMT and Trails in the National Policies and Strategies .....	18
III.1.5 Rural Tourism along the LMT Clusters .....	20
III.1.6 Cross Regional Analysis for Rural Tourism along the LMT Clusters .....	30
III.1.7 Rural Tourism Strategic Recommendations .....	33
III.2 Cultural Heritage .....	35
III.2.1 Defining Heritage .....	35
III.2.2 Cultural Heritage Stakeholders’ Mapping .....	37
III.2.3 General findings .....	41
III.2.4 Cultural Heritage Projects and Initiatives .....	45
III.2.5 Cultural Heritage along the LMT clusters .....	48
III.2.6 Cultural Heritage Cross Regional Analysis .....	58
III.2.7 Cultural Heritage Strategic Recommendations .....	59
III.3 Environmental Conservation and Climate Change .....	62
III.3.1 Land cover-land use change .....	62
III.3.2 Land designation status .....	66
III.3.3 Biodiversity hotspots .....	70
III.3.4 Water Resources .....	73
III.3.5 Climate Change .....	74
III.3.6 Thematic Risks .....	76
III.3.7 Key actors and initiatives mapping .....	83
III.3.8 Comparative Analysis .....	88
III.3.9 Strategic recommendations for Environmental Conservation and Climate Change .....	89
IV. CROSS SECTORAL ANALYSIS: TOURISM – ENVIRONMENT - CULTURE NEXUS .....	91
Annexes .....	93

## Acronyms

ACE	Association for Community and Environment
ACS	Al-Shouf Cedar Society
ACTED	Agency for Technical Cooperation and Development
ADR	Association du Développement Rural
AFD	Agence Française de Développement
AFDC	Association for Forest Development and Conservation
AIFM	Association Internationale des Forêts Méditerranéennes
AUST	American University of Science and Technology
BALADI	Building Alliances for Local Advancement, Development and Investment
CAS	Central Administration of Statistics
CBO	Community-based organization
CBC-Med	Cross Border Cooperation in the Mediterranean Mechanism
CCDR	Country Climate and Development Report
CDR	Council for Reconstruction and Development
CESNA-LB	Conservation of Environmental Sensitive National Areas in Lebanon
CMF	Cedar Mountain Foundation
CRT	Cultural and Religious Tourism
CSP	Community Support Program
DGA	Directorate General of Antiquities
DMOs	Destination Management Organizations
DPSIR	Driving Forces, Pressure, State, Impacts, Responses
ECOSOC	Economic and Social Council
ENI	European Neighborhood Initiative
EU	European Union
FAO	Food and Agriculture Organization
FHF	Food Heritage Foundation
FOBs	Faith Based Organizations
FTL	Fair Trade Lebanon
GEF	Global Environment Facility
GIS	Geographic Information System
ICH	Intangible Cultural Heritage
ICOMOS	International Council on Monuments and Sites
IDAL	Investment Development Authority for Lebanon
IUCN	International Union for the Conservation of Nature
IUL	Islamic University in Lebanon
IWMI	International Water Management Institute
KII	Key Informant Interviews
LARI	Lebanese Agriculture Research Institute
LAU	Lebanese American University
LCLU	Land Cover Land Use
LDN	Land Degradation Neutrality
LED	Lebanon Enterprise Development

LMT	Lebanon Mountain Trail
LMTA	Lebanon Mountain Trail Association
LIU	Lebanese International University
LIVCD	Lebanon Industry Value Chain Development
LOST	Lebanese Organization for Studies and Training
LRI	Lebanon Reforestation Initiative
LU	Lebanese University
MEDUSA	Mediterranean Sustainable and Adventure Tourism
MEET	Mediterranean Ecotourism Experience Network
CROSSDEV	Cultural Routes for Sustainable Social and economic Development in Mediterranean
MOA	Ministry of Agriculture
MOC	Ministry of Culture
MOE	Ministry of Environment
MOET	Ministry of Economy and Trade
MOT	Ministry of Tourism
MOU	Memorandum of Understanding
NCC	National Conservation Center
NCRS (CNRS)	National Center for Remote Sensing
NDSI	Normalized Differentiated Snow Index
NDU	Notre Dame University
NDVI	Normalized Differentiated Vegetation Index
NOISE	Needs-Opportunities-Improvements-Strength-Exceptions
NPMPPLT	National Physical Master Plan for the Lebanese Territory
NSRC	National Scientific Research Council
NTC	National Tourism Council
OECM	Other Effective Conservation Measures
PSL	Promoting Sustainable Livelihoods
RMF	Rene Mouawad Foundation
SCF	Snow Cover Frequency
SDD	Snow Disappearance Day
SPNL	Society for the Protection of Nature in Lebanon
TCH	Tangible Cultural Heritage
TIF	Trade Investment Facilitation
UA	Antonine University
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNDP	United Nations Development Programme
UOB	University of Balmand
US	Sagesse University
USAID	United States Agency for International Development
USJ	Saint Joseph University

## List of Figures

Figure 1 LMT Key Facts & Figures .....	3
Figure 2 LMTA vision, mission, objectives and programmes.....	4
Figure 3 LMT Regional Clusters .....	4
Figure 4 Lebanon’s Tourism Value Chain Structure.....	9
Figure 5 Rural Tourism and LMT Stakeholders Map.....	10
Figure 6 Cultural Heritage Categorization.....	36
Figure 7 Ministry of Culture Organizational Chart.....	38
Figure 8 Map of crafts in Lebanon (courtesy of Nahnoo).....	45
Figure 9 Heritage initiatives on the LMT (last 10 years) .....	46
Figure 10 Upper Qadisha Valley Map.....	50
Figure 11 Hadrian inscription according to Breton (1980) .....	54
Figure 12 Land Cover Land Use map.....	64
Figure 13: Habitat fragmentation .....	66
Figure 14: Existing and suggested protected areas .....	67
Figure 15: The soil vocations of Lebanon.....	69
Figure 16: A compiled map of protected areas and the foreseen national park in upper Aakkar .....	70
Figure 17: The potential IPAs of Lebanon .....	72
Figure 18: Vulnerability to climate change under the pessimistic scenario, by the end of the century .....	74
Figure 19: NSDSI trends between 2014 and 2023.....	78
Figure 20: Map of open burned dumping sites .....	80
Figure 21: The 335 localities with the highest number of deprived populations and pressure on natural resources ..	81
Figure 22 : Quarrying sites according to the quarrying master plan compared with the NPMPLT sites .....	82
Figure 23: The main environmental local actors along the trails .....	85
Figure 24: DIPSR Model for the tourism, environment, and cultural heritage nexus.....	91

## List of Tables

Table 1 Evolution of Rural Tourism in Lebanon .....	5
Table 2 Rural Tourism Market Segments in Lebanon.....	8
Table 3 Trails other than LMT and nature reserves.....	15
Table 4 Tourism Attractions along the LMT Akkar and Donnieh Cluster .....	20
Table 5 Rural tourism dynamics and stakeholders along the LMT Akkar and Donnieh Cluster .....	21
Table 6 Tourism Attractions along the LMT North Cluster .....	23
Table 7 Rural tourism dynamics and stakeholders along the LMT North Cluster.....	23
Table 8 Tourism Attractions along the LMT North Mount Lebanon Cluster.....	25
Table 9 Rural tourism dynamics and stakeholders along the LMT North Mount Lebanon Cluster .....	25
Table 10 Tourism Attractions along the LMT South Mount Lebanon Cluster .....	27
Table 11 Rural tourism dynamics and stakeholders along the LMT South Mount Lebanon Cluster .....	27
Table 12 Tourism Attractions along the LMT South Lebanon and Beqaa Cluster .....	29
Table 13 Rural tourism dynamics and stakeholders along the LMT South Lebanon and Beqaa Cluster .....	29
Table 14 Cross Regional Analysis for Rural Tourism along the LMT Clusters.....	30
Table 15 Stakeholders Role in TCH and ICH Management.....	41
Table 16 Main Challenges and Threats on TCH and ICH along the LMT .....	44
Table 17 TCH elements in Akkar and Donnieh LMT Cluster .....	48
Table 18 ICH elements in Akkar and Donnieh LMT Cluster .....	49
Table 19 TCH elements in North Lebanon (Qadisha Valley) LMT Cluster .....	50
Table 20 TCH elements in North Lebanon (villages surrounding the Qadisha Valley) LMT Cluster .....	51
Table 21 ICH elements in North Lebanon LMT Cluster .....	52
Table 22 TCH elements in North Mount Lebanon LMT Cluster .....	53
Table 23 ICH elements in North Mount Lebanon LMT Cluster .....	54
Table 24 TCH elements in South Mount Lebanon LMT Cluster .....	55
Table 25 ICH elements in South Mount Lebanon LMT Cluster .....	56
Table 26 TCH elements in South Lebanon & Beqaa LMT Cluster .....	57
Table 27 ICH elements in South Lebanon & Beqaa LMT Cluster.....	58
Table 28 Cultural Heritage Cross Regional Analysis.....	59
Table 29: Share of the main land cover types and their distribution by LMT sections .....	65
Table 30: Protected areas along the LMT by category of protection .....	66
Table 31: Features of the impact of climate change according to climate events .....	75
Table 32: Projected losses induced by climate change in key sectors by 2040 (Source: Lebanon CCDR/CNRS data) ..	75
Table 33: Trail length segregation based on mass movement risk categories .....	77
Table 34: Trail length segregation based on erosion risk categories .....	77
Table 35: Snow indices values and years above value per LMT section .....	79
Table 36: Main national actors and their respective roles .....	83
Table 37: The environmental status and major threats along the LMT sections and side trails.....	88

## Executive Summary

This study examines rural tourism, cultural heritage preservation, environmental conservation, and climate change along the Lebanon Mountain Trail to support the Lebanon Mountain Trail Association in making informed decision and effective strategic planning for the trail’s management and promotion as a premier nature-based and rural tourism destination in Lebanon and the region.

Lebanon’s rural tourism sector has great potential due to its diverse landscapes, rich cultural heritage, and traditional practices. Key initiatives have focused on nature-based tourism, hiking trails, rural accommodations, agritourism, cultural tours, and culinary tourism. However, challenges include insufficient infrastructure, lack of legal frameworks, ineffective marketing, inconsistent service quality, seasonal dependence, economic uncertainties, accessibility issues, and sustainability concerns. To overcome these challenges, recommendations include standardizing trail management, establishing governance mechanisms, updating legal frameworks, improving marketing strategies, ensuring consistent service quality, and addressing seasonal dependence. Additionally, leveraging digital platforms and social media can enhance marketing efforts and broaden the trail's reach to global audiences.

Lebanon’s cultural heritage, encompassing the built environment, history, archaeology, natural landscapes, traditions, arts, and crafts, requires comprehensive conservation efforts. A comprehensive assessment of cultural assets, development of a database, conservation actions, support for local communities, and development of thematic trails and immersive experiences are recommended. Promoting educational programs and workshops can further engage local communities in heritage preservation and tourism activities.

Environmental conservation and climate change are critical for sustaining Lebanon’s ecosystems. Efforts include modernizing laws, formulating management plans, ecological restoration, improved land management, and protecting sensitive areas. Key recommendations are promoting sustainable resource management, conserving biodiversity hotspots, implementing climate change strategies, and promoting responsible tourism. Incorporating renewable energy sources and eco-friendly practices can also mitigate the environmental impact of tourism activities.

A holistic approach is recommended, encompassing stakeholder collaboration, capacity building, technology integration, support for innovation and entrepreneurship, visitor impact monitoring, and sustainability promotion. By fostering a collaborative environment among various stakeholders, the Lebanon Mountain Trail can become a model for sustainable tourism development. Addressing these needs will ensure effective management and preservation of the Lebanon Mountain Trail, contributing to Lebanon’s sustainable development goals and enhancing the quality of life for local communities.

## I. INTRODUCTION AND METHODOLOGY

The objective of this sectoral diagnosis study is to provide the Lebanon Mountain Trail Association (LMTA) with detailed insights into the sectors of rural tourism, cultural heritage preservation, environmental conservation, and climate change along the Lebanon Mountain Trail (LMT). This report aims to assist the LMTA and other relevant stakeholders in understanding the dynamics and urgent needs of each sector, thus facilitating informed decision-making and strategic planning for the effective management and preservation of the LMT. Furthermore, the study seeks to enhance the positioning and promotion of the LMT as a premier nature-based and rural tourism destination, functioning as a national corridor for sustainable development.

The diagnostic process employed the Rapid Appraisal Methodology, enabling a swift yet comprehensive assessment of rural tourism, cultural heritage preservation, environmental conservation, and climate change issues along the Lebanon Mountain Trail (LMT). The methodology involved the following steps:

- 1. Defining the Objectives:** clearly outline the objectives of the rapid appraisal, specifying the aspects of each sector to be diagnosed. This includes tourism market dynamics, economic impact, investments, infrastructure, community involvement, sustainability dimensions, best practices, stakeholders’ roles, projects and initiatives, policies, regulations, and legal aspects.
- 2. Desk Review:** Conduct a thorough review of existing literature, reports, and data related to the studied sectors by three national experts specialized in each sector. The desk review presents a detailed situational analysis and identifies the sectors’ key trends, challenges, and opportunities.
- 3. Stakeholders’ Identification and Mapping:** In parallel with the desk review, the experts identified and mapped key stakeholders in each sector, encompassing government agencies, donors, local authorities, local communities, academia, NGOs, associations, and the private sector. The stakeholder mapping elucidates the roles and relationships among these stakeholders.
- 4. Desk Review and Stakeholders’ Mapping Validation:** Validation of the data collected through the desk review and the stakeholders’ mapping exercise with subject-matter experts and the LMTA team.
- 5. Synthetic Analysis and Recommendations:** Analyze the collected data from the desk review and stakeholders’ mapping. This includes:
  - Compiling and synthesizing all collected data and information into concise reports for each sector. The analyzed information is presented and visualized using various analytical frameworks such as DPSIR (Driving Forces, Pressure, State, Impacts, Responses); Venn Diagrams representing stakeholders’ roles and relations; and NOISE (Needs-Opportunities-Improvements-Strength-Exceptions).
  - Highlighting key findings, challenges, and potential areas for improvement for each sector, linking the key improvements to clear and actionable recommendations for enhancing each sector along the LMT.
  - Prioritizing actions that can be implemented quickly for immediate impact.
  - Compiling the three different sectoral reports into one consolidated report and presentation.

The study faced limitations due to the inability to conduct field visits and Key Informant Interviews (KII) because of time constraints and the unstable security situation in Lebanon. Despite these challenges, the in-depth situational analysis of each sector remained robust. This resilience is attributed to the involvement of national experts who have extensive experience and ongoing engagement in multiple subject-related projects and initiatives. Their familiarity with the field and contacts with key stakeholders ensured the comprehensiveness and accuracy of the analysis.

## II. OVERVIEW OF THE LEBANON MOUNTAIN TRAIL

The Lebanon Mountain Trail is Lebanon’s first long-distance hiking trail. It stretches from Aandqet in northern Lebanon to Marjaayoun in the south, a 600 km long trail (covering the main linear trail composed of 27 sections and stretching over 450 km, 5 side trails of 83 km, 6 thematic trails of 56 km, and 2 network trails of 16 km). The LMT crosses more than 80 towns and villages at an altitude ranging from 570 meters to 2,073 meters above sea level, 10 protected areas, 6 important bird areas, 3 nature reserves, 2 UNESCO Man and Biosphere Reserves, and 1 World Heritage Site. There is no access control to the LMT sections and visitors do not pay any fee to hike the LMT, except for the sections located inside nature reserves. (Figure 1)

450 km	Linear Trail (27 Sections)
83 km	5 Side Trails
56 km	6 Thematic Trails
16 km	2 Network Trails
2,073 m	Highest point
570 m	Lowest point
76	Villages and towns
10	Protected Sites
6	Important Bird Areas
3	Nature Reserves
2	Man & Biosphere Reserves
1	World Heritage Site

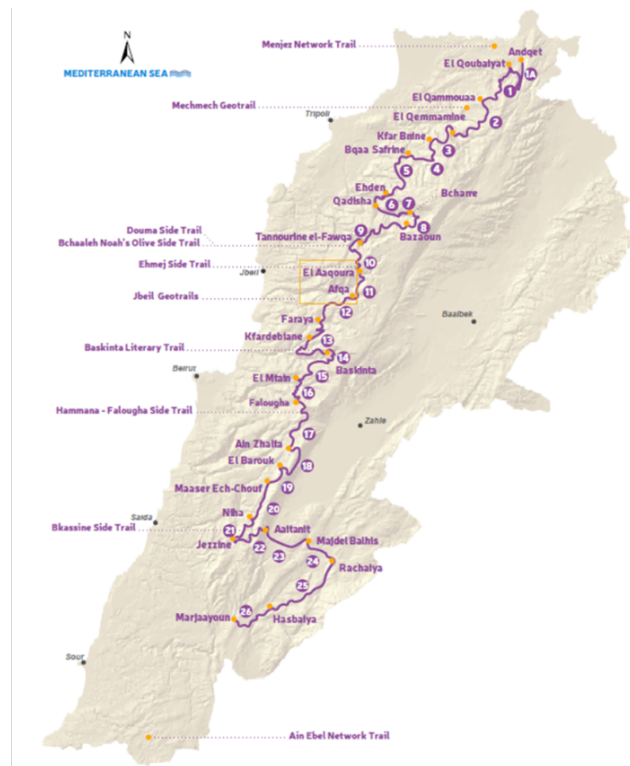


Figure 1 LMT Key Facts & Figures

The creation of the LMT between 2005 and 2007 by a Lebanese-American environmental consulting firm, with funding from the United States Agency for International Development (USAID), marked a turning point in the evolution of Lebanon’s rural tourism sector. This initiative heralded a significant role for rural tourism in general and hiking in particular. In 2007, the Lebanon Mountain Trail Association was established to ensure the sustainability of the trail, focusing on its long-term development and protection. The LMTA aims to position the LMT as a prime destination for sustainable rural tourism in Lebanon, while also serving as a platform and corridor for the conservation and protection of natural and cultural heritage. Additionally, it seeks to leverage social development and foster economic opportunities in rural areas. The LMTA operates as a non-governmental organization (NGO) governed by its members, who join through a membership fee. These members elect a board of trustees responsible for setting the vision, missions and strategic direction of the association. The board of trustees, in turn, appoints an executive manager and a team to implement the LMTA’s strategy and action plans, which are summarized in Figure 1.


<b>VISION</b>	For the Lebanon Mountain Trail to become a world-class destination for outdoor and responsible tourism, to become protected by the Government of Lebanon, Municipalities, and local communities, and to be recognized by international organizations.
<b>MISSION</b>	Maintain, protect and develop the LMT and its side trails.
<b>OBJECTIVES</b>	<ul style="list-style-type: none"> <li>• Promote the LMT as a destination for rural tourism and well-being</li> <li>• Conserve the natural resources and protect the cultural heritage on the LMT</li> <li>• Advance economic opportunities on the LMT through responsible tourism</li> <li>• Encourage responsible behavior through targeted education, community mobilization, and outreach</li> </ul>
<b>PROGRAMMES</b>	 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>Community Development</span> <span>Trail &amp; Conservation</span> <span>Education</span> <span>Advocacy &amp; Communication</span> </div>

Figure 2 LMTA vision, mission, objectives and programmes

To conduct the current sectoral analysis, the LMT was divided into five principal regional clusters (Figure 3), taking into account the geographical characteristics and the socio-economic dynamics of each cluster to ensure coherence, particularly in the analysis of the tourism and heritage sectors. For the environmental sector, the analysis adhered to the sectional divisions of the LMT, as the clusters do not necessarily exhibit coherence in terms of natural resource distribution and characteristics.

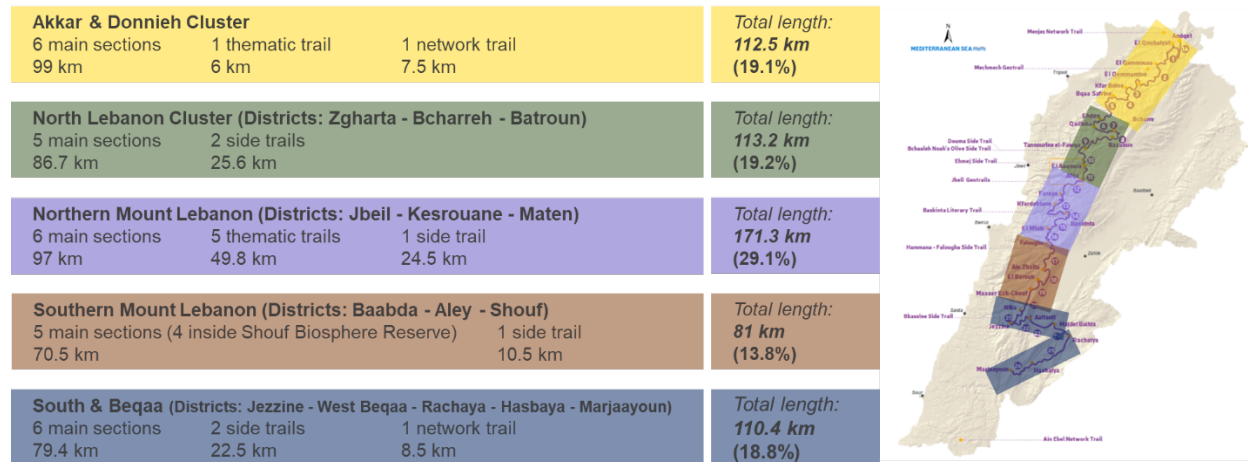


Figure 3 LMT Regional Clusters

### III. Diagnosis by Sector and Region

#### III.1 Rural Tourism

##### III.1.1 Rural Tourism in Lebanon: Evolution and Challenges

The development of rural tourism in Lebanon only began in the late 1990s, so it can be considered as an emerging activity that still has a lot of potential for growth and improvement<sup>1</sup> (Table 1).

**Table 1 Evolution of Rural Tourism in Lebanon**

Timeline	Description
1950-1975	<b>Conventional Tourism:</b> Tourism was concentrated mainly in big urban areas (Beirut) and was based on discovering metropolitan sites, which still preserved their authenticity and local heritage, and were not influenced by globalization.
1975-1990	<b>Civil War:</b> During the civil war tourism was paralyzed and the country suffered great devastation. It took six years following the end of the war for tourism to resume.
1990-1997	<b>Rural Tourism Pioneers' Initiative – a Niche Market:</b> The creation of the first Adventure Tourism operators in Lebanon took place between 1995 and 1997. The market was limited to highly specialized foreigners, interested in getting to know 'exotic' destinations; and to the domestic market, which was beginning to discover some mountain territories, attracted by their landscapes, proximity to urban areas, and more temperate climate in summer.
1998-2004	<b>Development of Nature Reserves and Introduction of Ecotourism:</b> Starting 1998, rural tourism began to gain popularity, thanks to the designation of the first nature reserves in Lebanon and the introduction of the ecotourism concept. During these years, the number of rural tourism and ecotourism tour operators increased to 9 and one-day trips began to be marketed for the domestic demand, as well as 7-day packages for the international market.
2005-2008	<b>Development Projects and Initiatives:</b> Between 2005 and 2008, the United States Agency for International Development (USAID) funded a project to develop the LMT with the aim of creating a hiking experience that connects different mountain destinations and thus attracts specialized market segments. In parallel, another USAID-funded project supported the development of alternative accommodation forms in rural areas, with the aim of increasing economic opportunities and encouraging job creation in the tourism sector.
2009-2014	<b>Booming of Rural Tourism Providers and Products:</b> Starting 2009 new tour operator companies specializing in nature tourism and ecotourism in rural areas began to appear. In parallel, projects were carried out by the Ministry of Tourism to improve the accommodation sector. Hence in 2011, political instability due to the Syrian War resulted in a decrease in the number of international tourists coming to Lebanon. However, this decline was offset by a growing domestic demand, and rural tourism continued to grow. The number of rural tourism and ecotourism tour operators increased to more than 60 with many working in the informal economy due to the absence of rules and regulations.
2015	<b>National Rural Tourism Strategy:</b> in 2015 the first National Rural Tourism Strategy was launched, with the aim of facing new challenges in the sector and positioning the country's rural destinations as a benchmark in the region and internationally.
2016-2021	<b>Continued Growth:</b> Despite the continued growth and booming of the rural tourism sector, the degree of implementation of the Rural Tourism Strategy has been medium to low. In 2021 there were more than 100 rural tourism/ecotourism/nature tourism operators in rural areas. All these companies have been created in just 25 years. Nevertheless, there is no certainty about the legal framework for tour operators.
2022	<b>National Sustainable Mountain Tourism Strategy for Lebanon:</b> In 2022 the first National Sustainable Mountain Tourism strategy for Lebanon Rural Tourism Strategy was launched and adopted by the Ministry of Tourism and the Ministry of Environment with support from UNDP and funding from GEF. The main goal of the strategy is to position Lebanon as a prime mountain tourism destination in the Middle East focusing on sustainability and innovation.
2023-...	<b>Political and security unrest:</b> After a relatively promising summer season in 2023 with increasing number of international arrival, the events in Gaza on October 7, 2023, and the consequent war resulted in security problems in south Lebanon and political unrest. This situation has significantly affected the tourism industry, almost completely eliminating the international market, while the local domestic market is in survival mode.

The development of the National Strategy for Rural Tourism in 2014–2015 became a milestone for the development of the sector. This strategy<sup>2</sup> defined rural tourism as: “Tourism that takes place in rural territories, outside big urban areas in Lebanon”, where:

- Visitors experience the authentic Lebanese way of life in villages and rural areas, different from urban areas;

<sup>1</sup> Abou Arrage, J. (2020). Rural Tourism and Sustainable Development in Lebanon: Evolution and Dynamics. In: S. Aggarwal et al (Eds.), Rurality, Ruralism and Rural Tourism, Ane Books Pvt. Ltd., ISBN: 978-93-89212-33-4, pp. 347-373.

<sup>2</sup> Ministry of Tourism (2015). *Rural tourism strategy in Lebanon*. Beirut, Lebanon.

- Landscapes, nature, culture, gastronomy, and heritage (intangible and tangible) are at the heart of activities;
- Local communities are aware of the value of local assets and they work to preserve them; they are involved in developing and managing tourism for their own socio-economic and cultural benefit; and
- Tourism development, businesses, and facilities are of small scale.

In 2022, the National Sustainable Mountain Tourism Strategy for Lebanon, considered that rural tourism definition can also be applied to mountain tourism, as they both share the same values and principles, as well as the perspective of the tourist that looks for a different experience than what can be normally offered in urban areas. The tourism assets in mountain areas of Lebanon are diverse and include lakes, rivers, waterfalls, valleys, mountain trails, villages, rural towns, agricultural fields, farmhouses, museums, arts and crafts ateliers, forest reserves, protected areas, hiking trails, historic and heritage sites and locations, guesthouses, and rural lodgings. Some of the activities included in the definition of mountain tourism that can be experienced in Lebanon are: hiking, trekking, natural sites visit, ecotourism in nature reserves, sightseeing and visiting villages, agritourism, wine and food tourism, adventure outdoor sports, camping, crafts making, participating in local festivals, visiting archeological and historical sites, and religious tourism. Therefore, Lebanon’s rural and mountain tourism sector plays a pivotal role in enhancing economic development, empowering communities, and preserving cultural heritage. By leveraging the country’s diverse landscapes and rich history, rural tourism has become a key driver for sustainable growth and community resilience.<sup>3</sup>

Over the past three decades, a concerted effort by the government, non-governmental organizations (NGOs), the private sector, and local communities has significantly promoted rural tourism. This collaborative approach has helped to highlight Lebanon’s unique offerings and attract visitors from around the world. The sector provides a wide range of services and activities that cater to various interests and preferences. These include nature-based tourism, adventure and outdoor sports, agritourism, culinary and wine tours, cultural visits, rural accommodation, homestays, and local guiding services. Each of these offerings showcases the country’s natural beauty and cultural wealth, providing visitors with memorable experiences. However, the growth of rural tourism in Lebanon is hindered by several challenges, including:

- **General Infrastructure Deficiencies:** Inadequate infrastructure in rural areas hampers the overall visitor experience and limits the potential for growth. Key issues include poor to average road networks and absence of public transportation, a shortage of quality accommodations in remote areas and essential amenities, unreliable communication services in remote rural areas, and insufficient health and safety measures in many facilities. Additionally, the lack of supporting facilities such as visitor centers and guided tour services further detracts from the tourist experience.
- **Lack of Legal Framework and Regulations:** The absence of a robust legal framework and clear regulations has resulted in unstructured development and operational inefficiencies within Lebanon’s rural tourism sector. This lack of regulation is particularly evident in nature-based and outdoor activities. For example, there are currently no specific legal frameworks governing trail development and standards, nature guiding, or tour operating in natural settings. Recognizing these gaps, the LMTA is making significant efforts to regulate the trails sector by creating national norms and standards for trail development, management, and maintenance. These initiatives aim to establish a structured and sustainable framework that will enhance the quality and safety of trails, ensuring a better experience for trail visitors and promoting the conservation of Lebanon’s natural and cultural heritage along the LMT and other trails.

---

<sup>3</sup> MoE/UNDP/GEF (2022). *Sustainable Tourism Strategy for the Mountains of Lebanon*. Beirut, Lebanon.

- **Unstructured Value Chain and Weak Integration:** The rural tourism value chain in Lebanon suffers from a lack of proper structuring and integration, leading to missed opportunities for synergy and collaboration. This fragmentation impacts the efficiency and effectiveness of the sector, preventing it from reaching its full potential. A well-structured value chain involves the seamless integration of various components, including transportation, accommodation, food and beverage services, tour operators, local guides, and cultural and recreational activities. In Lebanon, these elements often operate in isolation rather than as part of a cohesive system. This disconnection hinders the ability to provide a comprehensive and satisfying visitor experience. For instance, tourists need to search in different platforms and through multiple channels to find reliable information about available activities, local accommodations, and transportation options, making trip planning cumbersome. Local businesses and service providers miss out on the benefits of cross-promotion and collaborative marketing, which could enhance their visibility and attract more visitors. The absence of a unified strategy also makes it difficult to maintain consistent quality standards, further impacting the reputation and appeal of many rural tourism destinations
- **Environmental and Sustainability Concerns:** Environmental sustainability is crucial in Lebanon's rural tourism sector to prevent the degradation of natural resources. Uncontrolled nature-based tourism poses risks such as soil erosion, vegetation degradation, and pollution from waste, threatening biodiversity and local ecosystems. Additionally, sustainable tourism practices aim to conserve cultural heritage and support local communities economically and socially. Best practices include respecting the carrying capacity of natural sites, monitoring and measuring visitors flow and impact to natural sites, investing in clean energy and water saving techniques, relying on local products, setting standards and quality control for rural tourism services nature-based activities, adopting Leave No Trace principles, and integrating community-based tourism models. While many small rural businesses and entrepreneurs have begun adopting sustainability practices, particularly in areas along or near the LMT, they still lack the support and expertise needed to enhance and elevate their sustainability efforts, especially in terms of financing and use of new technologies.
- **Insufficient Visitor Monitoring and Absence of Market Information:** In Lebanon's rural tourism sector, particularly along the LMT, a significant challenge lies in the insufficient monitoring of visitors and the absence of comprehensive market information. Most of the rural tourism destinations, except for very few nature reserves, lack robust mechanisms to track visitor numbers, demographics, and behaviors. Consequently, accurately measuring the rural tourism sector's share in the overall tourism market and its contribution to local economic development is almost impossible. This lack of data impedes effective planning and decision-making processes for rural tourism development and management. Without accurate insights into visitor preferences, trends, and satisfaction levels, stakeholders struggle to personalize experiences, allocate resources efficiently, and seize emerging market opportunities. Furthermore, the absence of market information complicates efforts to attract investment, secure funding for infrastructure improvements, and create targeted marketing campaigns. Addressing these issues is crucial for enhancing the sustainability and competitiveness of Lebanon's rural tourism offerings, including those along the LMT.

### III.1.2 Rural Tourism in Lebanon: Market Dynamics

There are no statistics or recent studies revealing the market dynamics and trends of rural tourism in Lebanon due to the absence of National Tourism Accounts and the informal nature of the rural tourism sector. Hence, the Rural Tourism Strategy in Lebanon<sup>4</sup> and the National Sustainable Mountain Tourism Strategy for Lebanon<sup>5</sup> identified the main rural tourism segment summarized in

---

<sup>4</sup> Ministry of Tourism (2015). Rural tourism strategy in Lebanon.

<sup>5</sup> MoE/UNDP/GEF (2022). *Sustainable Tourism Strategy for the Mountains of Lebanon*. Beirut, Lebanon.

Table 2.

Table 2 Rural Tourism Market Segments in Lebanon

Main segment	Sub-segment	Opportunities and issues
Domestic market, Lebanese living in Lebanon	<b>Urban families:</b> looking to spend time with their relatives surrounded by nature, enjoying affordable, healthful, and family-friendly services, accommodations, and activities where leisure and education are highlighted.	<ul style="list-style-type: none"> <li>• They are aware of the situation in Lebanon and are less affected by the ups and downs of the security situation.</li> <li>• They have the potential to reduce seasonality through short breaks during the mid and low season. International mobility restrictions worldwide due to Covid-19 have generated an increase in interest in discovering their own country.</li> <li>• They travel mainly for short periods of time (1–2 days).</li> <li>• They are mainly concentrated in areas close to urban centers.</li> <li>• Given the reduction in purchasing power, local trips are more affordable than trips abroad, and the cost for activities, tourist packages, and accommodations are relatively lower.</li> </ul>
	<b>Young urban professionals:</b> educated and looking for trendy experiences and adventures.	
	<b>Special interest groups:</b> Companies and corporations looking for team building opportunities, clubs and associations looking for summer camps, and outdoor educational activities for groups (birdwatching, hiking, etc.).	
Domestic market, foreign expats living in Lebanon	These are travelers who are looking to discover the local characteristics of Lebanon and who want to become immersed in the local culture. They look for authenticity, try to discover new and unknown places, and want to feel part of the destination by interacting with local communities.	<ul style="list-style-type: none"> <li>• Have significant purchasing power and provide a higher impact on their destinations, since they tend to hire guide services, stay overnight in boutique accommodations, and participate in nature, cultural, sports, and adventure activities and experiences.</li> <li>• They become an incentive for their friends and families to visit the country and become 'ambassadors' of the destination.</li> <li>• They travel mostly for short periods of time, adapting to the country's festive calendar.</li> <li>• They have a greater aversion to risk than local travelers.</li> <li>• They are mainly concentrated in areas close to urban centers</li> </ul>
Regional international market	<b>Arab countries:</b> This refers to tourists from Jordan, Syria, Egypt, or the GCC countries looking for luxury, good food, and good weather in a relaxed country with diverse societies, including Muslim traditions. Young Arabs also look to discover new trendy places and to experience outdoor activities and adventure.	<ul style="list-style-type: none"> <li>• Have high purchasing power and look for trendy and quality activities and services when travelling.</li> <li>• They are generally aware of the situation in the country and can be less affected by the ups and downs of the security situation.</li> <li>• Require very high-quality standards in terms of accommodations and services, especially when travelling to remote areas.</li> <li>• Do not look for active tourism activities, prefer other types of entertainment, but appreciate natural and cultural heritage.</li> </ul>
	<b>Western expats in the GCC:</b> emerging demand segment, as GCC countries are attracting more expats from European and Western countries. They are young professionals, educated and interested in visiting the region during short breaks from the Gulf.	<ul style="list-style-type: none"> <li>• Have the purchasing power but almost no time to spend, so they look for trendy and quality activities and services when they travel.</li> <li>• Eager to discover authentic experiences in Lebanon, like nature, sports, adventure, and local culture.</li> <li>• Might prefer other 'popular' regional destinations on their bucket list (Jordan, Egypt, etc.).</li> <li>• High quality and inspirational media content are needed to inspire and attract this segment to a destination.</li> </ul>
International Market	<b>Emigrated Lebanese Living and Working Abroad:</b> This subgroup seeks to reconnect with their homeland and are interested in heritage tourism that highlights culture, religion, genealogy, identity, and history. They also have the advantage of speaking the language and are more familiar with local dialects. They are more likely to stay in locally managed accommodations, eat at local restaurants, and shop in locally managed shops than are other international tourists.	<ul style="list-style-type: none"> <li>• Have strong purchasing power and look for trendy and high-quality tourism activities and services when they come back to visit their relatives.</li> <li>• They are generally aware of the situation in the country and can be less affected by the ups and downs of the security situation.</li> </ul>
	<b>European, Americas, Asian and other countries:</b> This subgroup consists of citizens of all other foreign and European countries. For these source markets, Lebanon is perceived as a unique culture and geography in the Middle East, and as a society that blends Western and Arab cultures with a multi-religious composition, namely Christianity and Islam. Recent conflicts at or with neighboring countries affect the positioning of Lebanon for some markets, perceiving it as an insecure destination with serious official warnings from their national security institutions.	<ul style="list-style-type: none"> <li>• Lebanon is perceived in Western source markets as a unique destination for cultural tourism in the Middle East.</li> <li>• They spend from 7 to 10 days in the destination and provide a high impact when travelling by engaging local guides, agencies, transport, and accommodation.</li> <li>• A mature source market that wants to discover new destinations and looks for authenticity, pristine natural landscapes, and outdoor activities.</li> <li>• This segment has high purchasing power and is well educated and cultured.</li> <li>• Sensitive to political instability, safety, and security issues.</li> <li>• Strong competitors among other Middle East destinations.</li> </ul>

### III.1.3 The Rural Tourism Value Chain and Stakeholders Mapping

The tourism value chain follows the flow of travelers and tourists from the international and domestic markets. Travelers and tourists determine the demand and match their needs/preferences with the available supply and build

their product using the wide variety of services and activities. Thus, the tourism value chain is a complex structure formed of multiple service providers who together facilitate the total experience for the tourist.

Figure 4 illustrates Lebanon’s tourism value chain structure that includes eight major services and a multitude of categories for each service<sup>6</sup>.

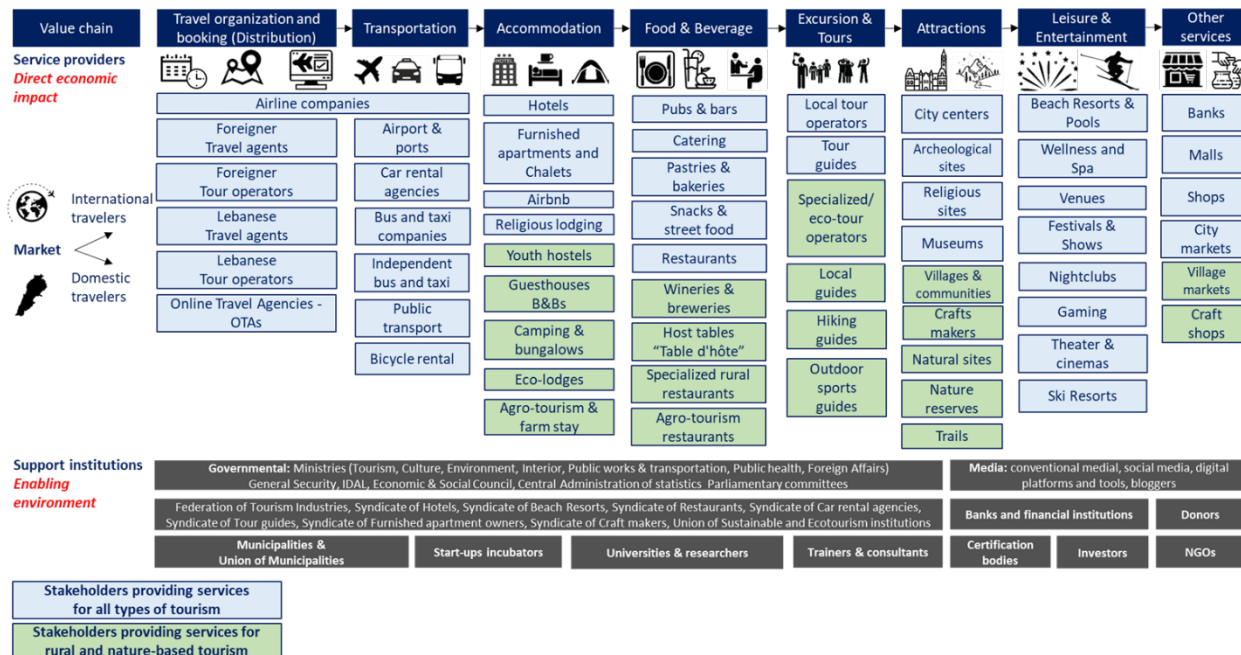


Figure 4 Lebanon’s Tourism Value Chain Structure

Travel organization, booking and transportation provide services for tourists and travelers regardless of the tourism types they are interested in, whereas leisure and entertainment services fall under the conventional tourism types. Accommodation, food and beverage, excursions and tours, and attractions provide services for tourists and travelers depending on their interest, the types of experience they are seeking. Thus, some of these services and attractions are specific for the rural and nature-based tourism types, they include:

- **Accommodation:** youth hostels, guesthouses, B&B, camping sites, bungalows, eco-lodges, agro-tourism/farm stays, Airbnb;
- **Food and beverage:** wineries, breweries and distilleries, host tables (tables d’hôtes), and specialized restaurants related to rural, ecotourism and agro-tourism projects and initiatives;
- **Excursions and tours:** specialized tour operators and eco-tour operators, local guides, hiking guides, and outdoor sports guides;
- **Attractions:** villages and communities, crafts makers, natural sites, nature reserves, and trails;
- **Other services:** village markets and craft shops.

The stakeholder mapping and analysis for the rural tourism sector identifies the various entities and organizations, their relationships with the LMTA, and their influence on the LMT. These stakeholders play crucial roles in rural tourism development, trail governance, hiking, and other trail-related activities. Figure 5 highlights the extensive network of

<sup>6</sup> USAID/Lebanon (2021). Lebanon Agriculture and Rural Empowerment Activity, Rural Tourism Sector Analysis: Ecotourism, Agro-tourism, Gastronomy and Wine Tourism. Beirut, Lebanon.

stakeholders, showing the interconnected nature of rural tourism and conservation efforts. Each group plays a unique role, but their collective efforts contribute to the overall success of the Lebanon Mountain Trail.

The size of each stakeholder's circle indicates its level of influence on the LMT, while proximity to the LMT map signifies the closeness of their cooperation with the LMTA. The dynamics and influence of these stakeholders are critical for the sustainability of the LMT and the overall experience of its users.

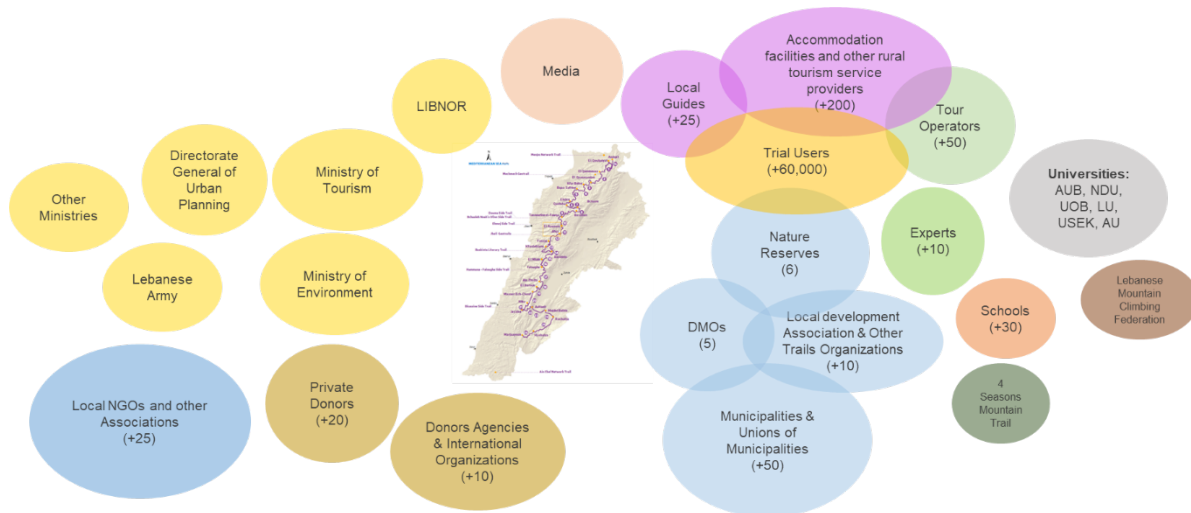


Figure 5 Rural Tourism and LMT Stakeholders Map

Positioned at the center, the LMTA is the main stakeholder and the LMT is the focal point around which all the stakeholders and efforts revolve. The key stakeholders and groups are:

**Government Bodies:** Rural tourism development on the public level is highly related to the central administration of the country represented by ministries, national councils and other affiliated bodies. The sector's governance is the shared between multiple institutions having different responsibilities.

- **The Ministry of Tourism** (MOT) is the primary government institution with responsibility for promoting tourism and administering the sector. The MOT has seven main departments and twenty sub-departments responsible for 1) promoting tourism, 2) regulating, coordinating, and monitoring tourism professions; 3) regulating, coordinating, and monitoring private companies and associations working in the tourism sector, 4) promoting and executing tourism investment projects, 5) facilitating and simplifying rules and requirements related to these projects, 6) applying laws and regulations related to tourism and tourism enterprises; and 7) developing archaeological and historical sites and museums for tourism purposes. The relationship between the MOT and the LMTA is important for the success and sustainability of the LMT as a prime tourism destination. This relationship is reflected in a Memorandum of Understanding (MOU) signed between the MOT and the LMTA, hence there are no clear efforts or joint projects to promote the LMT by the MOT.
- **The Ministry of Environment** (MOE) is responsible for protecting the natural resources and supervising the nature reserves management, including monitoring ecotourism activities inside the reserves. There no joint projects between the LMTA and MOE, hence, both entities collaborate and communicate together on specific projects and interventions, namely when it concerns the nature reserves, environmental conservation, and environmental education.
- **The Ministry of Culture** is responsible for excavating, preserving, and managing archeological sites; managing national museums; protecting other important cultural heritage assets such as traditional architecture; and

promoting cultural events. There is MOU signed between the MOC and the LMTA, but there are no clear efforts or joint projects to promote and protect the cultural heritage along the LMT. (Cf. *Cultural Heritage Section III.2*)

- **The Ministry of Agriculture** (MOA) protects forests, regulates the wine production sector, the fisheries sector and other agricultural activities that could be integrated in many forms of tourism. There are no common projects or collaboration between the LMTA and the MOA.
- **The Ministry of Public Works and Transportation** is responsible for developing and maintaining the transportation infrastructure which includes roads, airport and the seaports. The ministry is also responsible for the public maritime lands over which most of the beach resorts are built, as well as land use and land planning under the Directorate General of Urban Planning (DGUP). The LMTA has started lately collaborating with the GDUP to enlist the LMT path on the national, regional and local maps and study the possibility of protecting it under existing or potential new laws.
- **The Ministry of Interior and Municipalities** is responsible for law enforcement, ensuring safety and security, and regulating the work of municipalities. There are no common projects or collaboration between the LMTA and the Ministry of Interior.
- **The Ministry of Energy and Water** protects and manages the exploitation of rivers, water bodies and springs and regulates any activities along river banks. There are no common projects or collaboration between the LMTA and the Ministry of Interior.
- **The Ministry of Youth and Sports** gives permits for youth hostels and outdoor sports clubs/federations. There are no common projects or collaboration between the LMTA and the Ministry of Youth and Sports.
- **The Ministry of Public Health** inspects all the establishments providing food and beverage services including hotels and restaurants. There are no common projects or collaboration between the LMTA and the Ministry of Public Health.
- **The Ministry of Foreign Affairs** promotes Lebanon as a destination through its economic attaches in Lebanon's embassies around the world. There are no common projects or collaboration between the LMTA and the Ministry of Foreign Affairs.
- **The National Tourism Council.** Lebanon was among the first countries in the world who created a National Tourism Council (NTC) in 1962. The NTC was formed of representatives from the public sector and private sector; it acted as a national tourism board and was responsible for overseas promotion and tourism projects execution. After the creation of the MOT in 1966, the NTC was chaired by the minister of tourism with members from the private sector representing the tourism syndicates; its responsibilities and tasks were transferred to the MOT, and it became a consultative entity. In 1992, the NTC became completely inactive and its tasks were officially nullified by a ministerial decree. In 2022, the Minister of Tourism decide to reactive the NTC and transformed it into an independent NGO formed form private sector members active in the tourism industry. The NTC did few meeting and brief strategy to promote Lebanon in 2023, thus, the situation did not allow any action yet. There is no collaboration so far between the LMTA and the NTC.

Other than ministries, the following public institutions and entities support tourism development:

- **The Council for Reconstruction and Development** (CDR): The CDR is considered to be a super ministry in Lebanon. It is affiliated to the Prime Minister office. The CDR plans and executes multiple projects related to the basic infrastructure of the country and has high influence on the national development strategies. There is no collaboration between the LMTA and the CDR.
- **The Economic and Social Council** (ECOSOC): Even though it is formed by representatives from the private sector and the civil society, the Economic and Social Council is considered a public entity and works under the supervision of the Prime Minister office and provides consultative services to the cabinet. The tourism committee

of the council conducts research studies and organizes conferences and meetings to advance and develop tourism. There is no collaboration so far between the LMTA and the ECOSOC.

- **The National Tourism Council.** Lebanon was among the first countries in the world who created a National Tourism Council (NTC) in 1962. The NTC was formed of representatives from the public sector and private sector; it acted as a national tourism board and was responsible for overseas promotion and tourism projects execution. After the creation of the MOT in 1966, the NTC was chaired by the minister of tourism with members from the private sector representing the tourism syndicates; its responsibilities and tasks were transferred to the MOT, and it became a consultative entity. In 1992, the NTC became completely inactive and its tasks were officially nullified by a ministerial decree. In 2022, the Minister of Tourism decide to reactive the NTC and transformed it into an independent NGO formed form private sector members active in the tourism industry. The NTC did few meeting and brief strategy to promote Lebanon in 2023, thus, the situation did not allow any action yet. There is no collaboration so far between the LMTA and the NTC.
- **Parliamentary committees for agriculture and tourism** study and suggest new laws and regulations for the tourism sector and submit them to the joint parliamentary committee to be listed on the meetings of the parliament general assembly for voting and ratification. There is no collaboration between the LMTA and the Parliamentary committees.
- **The Investment Development Authority of Lebanon (IDAL):** IDAL is the national investment promotion agency promoting Lebanon as a key investment destination, and attracting, facilitating and retaining investments in the country. IDAL provides a framework for regulating investment activities in Lebanon and providing investors with a range of incentives and business support services. Tourism is among the priority sectors identified by IDAL among the most promising opportunities in terms of their investment potential and impact on socio-economic growth. IDAL used to promote investment in large scale tourism projects such as big hotels and resorts with funding originating mainly from the gulf countries. After the economic and Covid-19 crises the investment priorities changed and IDAL is revising the tourism sector priorities and is planning to promote more small-scale tourism projects with focus on nature-based tourism, ecotourism, cultural and religious tourism. IDAL enjoys financial and administrative autonomy and reports to the Prime Minister's office who exercises a tutorial authority over it. There is no collaboration between the LMTA and IDAL.
- **Kafalat:** Jointly owned by the public and private sector, Kafalat's main function is to extend to the banks a guarantee against 75% of Small and Medium Enterprises (SMEs) and start-up loans at a subsidized fee, and with bank loans subsidized rates, pegged to treasury bills interest rates. However, since the start of the financial crisis in 2019, banks have stopped lending and Kafalat has not guaranteed any new loan contract since the crisis in 2020.
- **The Central Administration of Statistics (CAS)** is responsible of collecting, analyzing and publishing data about the tourism sector performance such as number of international arrivals, hotel occupancy rates, number of visitors to major touristic sites, contribution of tourism to the GDP and to employment.
- **LIBANOR** is a national public agency responsible of setting national standards and norms for sectors in Lebanon. The LMTA has started recently to coordinate with LIBNOR to set national standards for trails design, implementation, management and maintenance in Lebanon. The LMTA is also a member in a sub-committee in LIBNOR responsible for sports activities.
- **The Lebanese Army** does not play a direct role related to rural tourism or trails, hence the LMTA do collaborate with the army for safety and security issues, especially in lands and areas with potential mines and mapping.

**Municipalities and Union of Municipalities:** Municipalities and Unions of Municipalities are crucial players in tourism development and governance at the local and regional levels through decentralized administration. They control many governance aspects within their jurisdiction that directly or indirectly affect tourism and trails.

Municipal responsibilities include budget control, revenue collection (taxes), expenditure management, urban planning, land use organization, public works planning and contracting, and providing essential services like household water supply, solid waste management, and wastewater treatment. Despite their significant role, municipalities face administrative and financial constraints. Many municipalities are small, lack sufficient personnel, and generate minimal tax revenue. Furthermore, they are bound by central administration bodies, including the Ministry of Interior and Municipalities, the General Directorate of Urban Planning, the Civil Service Council, and the Ministry of Finance, which limit their capacity to fulfill their roles as outlined by municipal laws. Unions of Municipalities offer a partial solution to these challenges. These unions are better staffed and have greater access to funds, enabling them to undertake local development projects more effectively. Along the LMT, there are approximately 80 villages and towns, with around 60 having established municipalities. The LMTA considers municipalities as strategic partners in advancing local and community development, as well as in managing, maintaining, and protecting the trail. The association maintains communication with all trail municipalities to keep them informed about projects, works, and other initiatives related to the trail. However, only about 10 municipalities have a close relationship with the LMTA, collaborating extensively. These municipalities include: Menjez, Bazaoun, Tannourine, Bchaaleh, Douma, Ehmej, Falougha, Jezzine, Aitanit, and Ain Ebel.

#### Tourism Service Providers:

- **Accommodation facilities and other rural tourism service providers:** Accommodation services along the LMT can be divided into three main categories:

1) *Conventional accommodation:* mountain hotels and inns (mainly family owned, small scale, and operate on seasonal basis), boutique hotels and guesthouses, furnished apartments and chalets.

2) *Alternative accommodation:* traditional guesthouses and B&B, youth hostels, camping sites, forest resorts, bungalows, eco-lodges, farm stays and religious lodging. Among alternative accommodation facilities, guesthouses are the most prevalent in LMT villages. Their number has grown significantly, from around 10 at the time of the LMT establishment to over 100 today. The diversity and concentration of these facilities are primarily found in North Lebanon and Mount Lebanon, particularly near nature reserves and touristic villages.

3) *Airbnb* are gaining importance in most of Lebanon's rural areas since 2019.

It is very difficult to account the occupancy rates in the different accommodation facilities since most of them are not obliged to report their statistics to the Ministry of Tourism, and many operate in the non-formal economy without being regulated.

- **Tour Organizers:** tour organizers along the LMT can be divided into 4 main categories:

1) *International Tour Operators:* A small number of international tour operators specialized in adventure tourism used to organize hiking trips to Lebanon in general and the LMT in particular. Their number did not exceed five before 2019. When the situation deteriorated in October 2023, they all canceled their tours to Lebanon and removed it from their catalogues.

2) *Conventional Lebanese Travel Agencies and Tour Operators:* the difference between travel agents and tour operators in Lebanon is blurred. The legal framework and registration system at the MOT does not differentiate between Travel agents and Tour operators according to the international definition.

The vast majority of Lebanese travel and tourism agents (95%) work on outbound tourism, offering mainly airline reservations and ticketing, hotel booking, transfer and car rental bookings, and holiday packages outside Lebanon. Only around 20 Lebanese travel and tourism agents work in inbound tourism and have the capacity to operate as travel agent and tour operator in the same time.

The latter, focus on conventional tourism; they sell holiday packages for international tour operators and organize tours in Lebanon covering the main touristic and archeological sites. Very few travel and tourism agents (less than ten), promote packages related to rural and nature-based tourism including trips to nature reserve, soft hikes, culinary and wine tourism.

3) *Specialized tour operators*: There are around 15 specialized Lebanese tour operators focusing on rural and nature-based tourism for the domestic and inbound tourism markets. These service providers are registered as commercial companies and do not have a specific category at the MOT. They are mainly led by their owners and use the services of part-time or seasonal guides. These operators focus on key rural destinations, and most of them include medium or advanced hiking tours along the LMT and in other mountain destinations.

4) *Informal clubs and tour organizers*: a new trend emerged in Lebanon in the post-war period with the creation of clubs, among which few are registered as outdoor sport clubs at the Ministry of Youth and Sports, and informal tour organizers who provide rural and nature-based tourism services and activities, and organize mainly one-day or weekend tours to rural areas and natural sites, focusing mainly on hiking on the LMT and other trails. Their number increased from around 15 in 2010 to more than 100 in 2024. These "service providers" are operated by their owners or members for the clubs and do not have employees. They use social media platforms to promote their activities and focus on the domestic market.

- **Local Guides**: Local guides and mountain guides, working mainly in village tours, hiking, and outdoor sports activities, are not officially recognized in Lebanon like licensed tour guides. There are no official statistics on the number of local guides providing hiking tours. However, it is estimated that there are around 100 hiking guides distributed as follows: 25 guides along most of the LMT sections, trained by the LMTA and listed on the LMT website, 25 guides in nature reserves providing their services exclusively inside the reserves, and 50 independent guides operating at village, regional or national level. Some independent guides also work as informal tour organizers, which creates further confusion in the market. Several efforts have been made by tourism professionals to organize this sector, without reaching any result. In 2023-2024, a private university launched a one-year diploma in mountain guiding and outdoor sports and joined the efforts to regulate the guiding sector.

**Trail Organizations and Trails**: In addition to the LMTA, other entities function as trail organizations in Lebanon, each with distinct mandates and statuses. These include: 1) Bchaleh Trails Association, which focuses on developing and maintaining trails in the Bchaleh village area, 2) Ehmej Development Association, which is dedicated to the trails in Ehmej village, 3) 33 North Tour Operator, which is working on the concept of a long-distance hiking trail in the Anti-Lebanon range, 4) Akkar Trail Association, which is an environmental NGO involved in different nature related activities including trails establishment and hiking activities in Akkar area, and 5) Darb El Sama Association, which is establishing the first pilgrimage trail in Lebanon "Darb Mar Charbel". This organization collaborates with the LMTA on a technical level for this project. These organizations contribute to the diverse landscape of trails in Lebanon, hence, they lack clear standards to follow in terms of trails management. On the other hand, in addition to the 600 km of trails along the LMT and its network, Lebanon offers:

- Around 600 Km of delineated trails inside 8 main nature reserves and in their buffer areas. These trails have access control and can be walked with or without nature reserve guides, and with or without tour organizers. Non-formal hiking and mountain guides can also access these trails.

- Around 600 Km of 1) short and medium trails (more than 50 trails) created by municipalities and local NGOs. These trails are created using different standards and criteria with limited maintenance and protection, and 2) informal trails used extensively by tour operators and organizers. These trails are accessible for free. (Table 3)
- Boukaat Loubnan Trails Network, an initiative by a private Tour Operator in Anti-Lebanon mountain range (approximately 300 Km).
- Saint Charbel Trail (first pilgrimage trail in Lebanon – Under development, approximately 160 Km).

**Table 3 Trails other than LMT and nature reserves**

Caza	Trails	Approximate length (Km)	Blazing / signage	Management/promotion	Protection
Akkar	Droub Wadi Oudine and Wadi Hesnebe between Aandaket and Qobayat	20	Partial	Council of Environment Qobayat and LRI	Medium
	Akkar trails linking villages, valleys and forests	50	None	Akkar Trail NGO	Medium
	Darb Menjez*	50	None	Municipality	High
Donnieh	Donnieh trails linking villages, valleys and forests	30	None	Donnieh Trail group	Low
Zgharta	Wadi Qadisha trails	50	Partial	Union of municipalities, Qadisha Heritage Association, Cedar Mountain Foundation, Qadisha Management Committee, Maronite church and monasteries	Medium
Bcharreh	Jabal El Makmel trails	25	None	None	Low
Batroun	Nahr Wadi El Jaouz trail	20	None	None	Low
	Darb El Msayelha	5	None	None	Medium
	Bchaaleh trails*	15	Yes	Municipality	Medium
	Wadi Harba trail	5	None	Wadi Harba Association	Medium
Jbeil	Ishtar trail in Aalmat	8	Yes	AFDC Aalmat unit	High
	Darb Fatre*	6	Yes	Municipality of Fatreh	Medium
	Droub Ghalboun	6	None	Municipality of Ghalboun	Medium
	Ehmej network of trails	20	Partial	Municipality of Ehmej Arz Ehmej Association, LRI	High
	Akoura lakes trail	10	None	None	Low
Kesrouane	Kfour thematic trails	10	Yes	Municipalities, Kesrouane Union of municipalities, local NGOs, scouts, LRI	Low to Medium
	Wadi El Salib trails	18	Yes		
	Darb El Qamar	4	Yes		
	Darb El Sama	3	Partial		
	Darb Hayata	8	Yes		
	Dabr El Hakleh Dlebta	5	Yes		
	Darb El Sendyane and Darb Jdoudna in Chahtoul	12	Partial		
	Dabr Chabrouh dam	10	None		
	Darb Bzoummar	5	Partial		
Ouyoun El Simane highland trails	15	None			
Matn	Darb El Khinchara*	6	Yes	Municipality of Khinchara	Medium
	Bekfaya El Naas trail	8	None	Municipality of Bekfaya	Low
	Dhour El Choueir trail	6	Partial	Municipality of Choueir	High
	Sannine summit trail	12	None	None	Low
	Tarik El Atrak Broummana	6	None	None	Low
Baabda	Dard Arsoun, Deir El Harf, El Kneisseh	20	None	None	Low
	Falougha Kneisseh summit trail	15	None	None	Low
	La Martine valley trails	15	None	None	Low
Aley	Kfarmatta El Fezer trail	15	None	None	Low
	Rouaisset El Naaman, Rechmaya trail	15	None	Municipality of Rechmaya	Medium
Shouf	Baaqline river trail	10	None	None	Low
	Jahliyyeh river trail	5	None	None	Low
	Mokhtara, Barouk river trail	10	Partial	Shouf Biosphere Reserve	High
Jezzine	Kfarhouna trail	8	None	St Jean Monastery	Medium
	Jezzine villages network of trails	20	Partial	Union of Jezzine Municipalities	Medium
Sour	Wadi Zebqine trail	10	None	None	Low
Bint Jbeil	Ain Ebel trail*	15	Yes	Municipality of Ain Ebel and local NGO	Medium
Hasbaya	Kawkaba olives and religious trail	10	None	Municipality of Kawkaba	Medium
Marjayoun	Ibl El Saqi trail	5	None	Hima Ibl El Saqi	Medium
West Beqaa	Darb El Karam network of trails*	20	None	Food Heritage Foundation	Medium
	Qaraoun trail	5	None	Municipality of Qaraoun	Medium

Caza	Trails	Approximate length (Km)	Blazing / signage	Management/promotion	Protection
Rachaya	Jabal Haramoun summit trail	15	None	None	Low
Baalbeck-Hermel	Jord El Hermel trails	30	None	None	Low
	Darb El Ain Ainata*	5	None	Municipalities, Droub Boukaat Loubnan initiative	Medium
	Chlifa Yammoune trail	15	None		Medium

\* Trails established and/or supported through USAID funded programs.

Source: (Compiled by Author based on personal data collection and online maps consultations)

**Hikers:** there are no official statistics on hikers in Lebanon and visitation to trails, except in nature reserves where access is controlled. In 2023, the total number of visits to nature reserves was 120,000<sup>7</sup>. In a recent study on the economic and social impact of the LMT conducted by the LMTA, it was estimated that in 2023 around 70,000 visits were done on the LMT, with almost 90% of the visitors being Lebanese and only 10% foreigners<sup>8</sup>.

### Donors Agencies & International Organizations

**The United States Agency for International Development:** financing mainly economic development projects with tourism components. The most important projects implemented in the last ten years include:

- *Lebanon Industry Value Chain Development - LICVD (2013-2017):* LIVCD program implemented 27 rural tourism projects benefiting Municipalities, Unions of Municipalities, nature reserves and NGOs, in addition to the elaboration of the National Rural Tourism Strategy. The projects aimed at upgrading the rural tourism industry and bringing economic benefits for rural communities through 1) Creating new rural tourism services and activities and upgrading existing ones; 2) Promoting rural tourism on the local, regional and national levels; and 3) Establishing linkages among the rural tourism value chain stakeholders.
- *Building Alliances for Local Advancement, Development and Investment - BALADI (2012-2020):* BALADI program supported local stakeholders (municipalities, NGOs, Faith Based Organizations FBOs) to improve their resilience in providing transparent, quality services to communities across Lebanon. Among the 59 implemented projects, 24 projects focused on ecotourism and rural tourism at the village level. ([www.baladi-lebanon.org](http://www.baladi-lebanon.org))
- *Lebanon Enterprise Development - LED (2018-2022):* LED program organized two international conferences on tourism resilience and digital transformation in the tourism industry, in addition to a promotional activity through producing social media videos about the culinary heritage of Lebanon with a renowned international food blogger. Recently, LED has given a grant to GWR, a certification company, to provide technical support to around 50 restaurants in the field of public health and Covid-19 measures; and another grant to Hospitality services to organize twelve online webinars on different issues related to the sector.
- *Community Support Program - CSP (2018-2024):* CSP is working on village-based development projects in partnership with municipalities and cooperatives. CSP is supporting rural tourism projects initiated by municipalities in partnership with local NGOs.
- *Trade and Investment Facilitation - TIF (2020-2025):* TIF program will target the ICT, agro-food, manufacturing and tourism sectors, focusing on supporting Destination Management Organizations (DMOs).
- *Promoting Sustainable Livelihoods - PSL (2020-2025):* The Promoting Sustainable Livelihoods project aims to improve the livelihoods of residents of target municipalities through training, technical assistance, infrastructure rehabilitation, and marketing and improve and upgrade existing assets in their municipalities with focus on agriculture and rural tourism. The PSL will be implemented across 7 clusters gathering 105 municipalities.

<sup>7</sup> Communication with major nature reserves managers

<sup>8</sup> Communication with the LMTA

**European Union:** The European Union funded several projects aiming to promote sustainable development with tourism and heritage components. More than 10 tourism and heritage projects are being implemented under the European Neighborhood Initiative (ENI) and the Cross Border Cooperation in the Mediterranean mechanism (CBC-MED). These projects involve partners from different Mediterranean countries and aim at creating regional networks for sustainable tourism management such as the Mediterranean Ecotourism Experience Network (MEET), Mediterranean Sustainable and Adventure Tourism (MEDUSA), Cultural Routes for Sustainable Social and economic Development in Mediterranean (CROSSDEV).

**UNDP:** The United Nations Development Program implemented and is implementing in partnership with local organizations and municipalities several projects and initiatives aiming to promote sustainable tourism services and activities under different programs such as the Lebanon Host Communities Support program.

**Italian Cooperation:** The Italian Cooperation implemented and is implementing several projects targeting cultural tourism and ecotourism. These projects fall under the economic development, environment, and heritage preservation and valorization programs. One of the most important projects funded by the Italian cooperation in the last few years is the Cultural and Religious Tourism – CRT project aiming to promote the religious heritage of Lebanon and to integrate it in the tourism value chain. ([www.culturalreligious tourism.com](http://www.culturalreligious tourism.com))

**National NGOs and Other Associations:** more than 25 NGOs are implementing regional and national projects aiming at developing rural and nature-based tourism services and activities, in addition to the preservation and valorization of the natural and cultural heritage:

- *Arcenciel:* promoting and valorizing local heritage through sustainable tourism and agro-tourism; managing a private natural park, farm, eco-lodge, and traditional restaurant. ([www.arcenciel.org](http://www.arcenciel.org))
- *The Rene Mouawad Foundation (RMF):* implementation of municipal development projects pertaining to tourism, livelihoods support through rural tourism initiatives. ([www.rm f.org.lb](http://www.rm f.org.lb))
- *Caritas:* implementation of municipal development projects pertaining to tourism, livelihoods support through rural tourism initiatives. ([www.caritas.org.lb](http://www.caritas.org.lb))
- *Nahnoo:* promotion and protection of public spaces and natural landscapes. ([www.nahnoo.org](http://www.nahnoo.org))
- *Lebanon Reforestation Initiative (LRI):* integration of tourism activities in forest management plans, creation of hiking trails and provision of training and technical support to local service providers such as guides and cooperatives, and capacity building for municipalities. ([www.lri-lb.org](http://www.lri-lb.org))
- *Association for Forest Development and Conservation (AFDC):* integration of tourism activities in forest management plans, creation of hiking trails, provision of training and technical support to local service providers such as guides, and capacity building for municipalities. ([www.afdc.org.lb](http://www.afdc.org.lb))
- *Council of Environment:* integration of tourism activities in environmental initiatives, creation of hiking trails and provision of training to local guides.
- *Society for the Protection of Nature in Lebanon (SPNL):* designation of Hima protected areas, and development and promotion of ecotourism services and activities. ([www.spnl.org](http://www.spnl.org))
- *The Food Heritage Foundation (FHF):* preservation and valorization of culinary heritage and promotion of gastronomy tourism. ([www.food-heritage.org](http://www.food-heritage.org))
- *Association du Développement Rural (ADR):* technical support and training for rural tourism service providers, with focus on the fisheries sector. [www.adr.org.lb](http://www.adr.org.lb)
- *Cedar Mountain Foundation (CMF):* preservation and valorization of the cultural and religious heritage of Wadi Qadisha world heritage site and Bcharreh district.

- *Fair Trade Lebanon (FTL)*: technical support and training for local food producers, and support to municipalities in establishing fair trade villages and fair tourism destinations. ([www.fairtradelebanon.org](http://www.fairtradelebanon.org))

**Universities:** There are ten universities in Lebanon offering tourism and hospitality management programs, either within specialized faculties, such as the Lebanese University (LU) and the Islamic University in Lebanon (IUL), or through programs affiliated with other business faculties in Saint Joseph University (USJ), Lebanese American University (LAU), Sagesse University (US), Notre Dame University (NDU), Holy Spirit University of Kaslik (USEK) University of Balamand (UOB), Lebanese International University (LIU), American University of Science and Technology (AUST). In addition, the Antonine University (UA) launched a one-year diploma program in mountain guiding and outdoor sports for the 2023-2024 academic year. The LMTA maintains good relations with most of these universities and actively participates in conferences, workshops, and roundtables related to tourism, environment, and culture. Moreover, many students use the LMT as a case study for their research projects. However, the LMTA does not have a well-documented and centralized collection of these studies at the association.

**DMOs:** Recognizing the DMOs' crucial role in promoting tourism and supporting local economies, the Trade and Investment Facilitation (TIF) project, funded by USAID, is supporting since 2020 the establishment of several DMOs across Lebanon. The main areas where DMOs were officially established are Jezzine, Shouf, Kesrouane, Batroun, and Deir El Ahmar, and others are in the process of creation in Saida, Jbeil, Maten, Baabda and Bcharreh. All the DMOs are still in their initiation phase and need at least three to five years to become fully operational and independent from donors' support. The LMTA started to coordinate with DMOs in the Shouf, Jbeil, Batroun, Kesrouane and Jezzine on issues related to trails management, protections and maintenance.

**Media:** in addition to the conventional media channels (TV, Radio, Newspapers and Magazine) which promote for domestic tourism, digital and social media platforms are becoming the main tools for tourism promotion in the international market. The LMTA has good relations with all media channels and platforms, collaborating mainly for promotion and communications.

### ***III.1.4 LMT and Trails in the National Policies and Strategies***

Destination competitiveness and tourism success depend on the ability of a country to adapt to current and upcoming social, economic, environmental, health, security, and technological challenges, and to focus more on the development of tourism governance and incorporate it within general and cross-cutting economic development strategies. Yet, Lebanon is not among the countries that have developed or is currently developing a comprehensive strategy for the tourism sector in general, and trails in particular. The MOT launched a number of scattered initiatives to boost tourism, coordinated promotional campaigns to position Lebanon on the touristic map and maintain its position as a tourist destination and led specific projects to support touristic activities. The obsolete legal framework, the complex enabling environment, and the lack of political and economic stability, did not help the public and the private sector to set a clear tourism policy orientation for the long-term development of the sector. The most important tourism development strategies and initiatives with reference to rural tourism and trails in general, and the LMT in particular are:

- ***National Rural Tourism Strategy- NRTS (2015-2019)***: The national rural tourism strategy was funded by USAID in the framework of the Lebanon Industry Value Chain project (LIVCD) in 2014 and endorsed by the MOT in 2015. It is a five years development strategy aiming at enhancing economic opportunities in rural areas through improving the competitiveness of the rural tourism value chain. Some of the eight strategic objectives were partially achieved, such as rural tourism promotion, product diversification, integration of rural tourism in the education system, and

business linkages; whereas the institutional and legislative framework, the conservation and protection of the natural and cultural heritage, quality control, and the improvement of information management and data collection still need to be improved by all concerned stakeholders in order to better organize the rural tourism value chain and insure its sustainability on the social, economic, and environmental levels. Despite these institutional and enabling environment gaps, tourism professionals and academics consider that rural tourism services and activities registered an important growth between 2010 and 2020. This trend is observed through the increasing number of rural accommodations offerings.

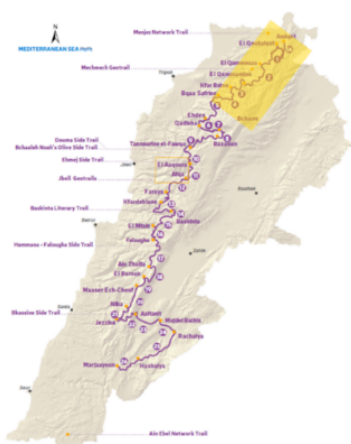
Moreover, most of the rural and nature-based tourism types were resilient to the different crises facing Lebanon, especially with their reliance on the diaspora and the domestic market. Today rural and nature-based tourism offer a significant potential for the tourism sector with many opportunities for SMEs, job creation, income diversification, innovation, heritage preservation and valorization, and economic and social cooperation, provided it is accompanied by the upgrade of tourism legal framework to make it more adaptable for the new trends of the industry, as well as to guarantee the sustainability of this market and its competitiveness on the long term.

- **Lebanon Economic Vision (2018):** Lebanon Economic Vision, a detailed report prepared by McKinsey for the Government of Lebanon in 2018, placed tourism as one of the most promising sectors and a driver of economic growth. The management consultancy's report - presented in the form of a 1,274 slide-long PowerPoint presentation - dedicated around 120 slides to the tourism sector. The tourism vision initiatives tend to prioritize the mass tourism concept, rather than promoting a sustainable tourism approach based on alternative and experiential tourism forms in alignment with the global trends, which were confirmed after the Covid-19 pandemic. From a marketing perspective, the vision proposed to promote and brand Lebanon as the "up and coming Mediterranean Riviera" with three main types of tourism: leisure (including "City and Entertainment," "Sun & Sea," and "Culture," as well as a "niche offering in ultra-luxury ecotourism"), business (with a focus on the MICE segment and the GCC), and medical tourism. This market and branding vision bears many paradoxes, especially for two types of tourism. The ultra-luxury ecotourism concept does not match with the realities of Lebanon due to the small size of its nature reserves, their proximity to urban settlements, the fragility of natural ecosystems, and the absence of legislation for ecotourism in general. As for the MICE and the Sun & Sea segment of leisure tourism, these segments are among the least competitive markets for Lebanon due to the low attractiveness of the coastline and the high levels of sea water pollution, in addition to the very low capacity to compete with neighboring destinations such as Turkey, Cyprus, UAE and Egypt, resulting in a deteriorated value for money. Moreover, sun and sea tourism is not a trending market segment anymore according to many international studies and reports. The 22 proposed priority tourism initiatives did not promote a balanced socio-economic development model since they favored the center-periphery model, which increases disparities and gaps between urban and rural areas. The vision mentions three tourism anchor destinations and urban/coastal hubs in Beirut, Byblos, and Sour, instead of developing regional tourism clusters and geographical destinations offering thematic experiences for travelers. In addition to that, the tourism priority initiatives are not presented with a clear time frame that identifies how long is needed for their implementation. In terms of economic impact, the LEV estimated that the number of jobs in the tourism sector will increase from 89,000 in 2017 to 185,000 in 2025. However, there is no explanation of how these 96,000 jobs will be created in the space of six years, how they will be distributed on the different sub-sectors of the tourism industry, and which tourism businesses and services will absorb them.
- **Lebanon Economic Recovery Plan (2020):** In light of the severe economic and financial crisis, the Government of Lebanon published an Economic Recovery Plan in 2020 aiming at revitalizing the economy and adopting policy reforms. The tourism sector was mentioned in this study as one of the main sectors that can ensure foreign currency for the country, but did not elaborate more about the needed reforms to unlock tourism potentials, neither it specified which tourism forms should be further developed and promoted.

- **National Sustainable Mountain Tourism Strategy for Lebanon (2022)** launched and adopted by the Ministry of Tourism and the Ministry of Environment with support from UNDP and funding from GEF. The main goal of the strategy is to position Lebanon as a prime mountain tourism destination in the Middle East focusing on sustainability and innovation. The strategy focuses clearly on the LMT as a prime tourism destination in Lebanon and integral part of mountain tourism identity and offer. It highlights the need to further develop experimental tourism along the trail beyond hiking, and to double the efforts to protect the trail with its natural and cultural landscape components.

### III.1.5 Rural Tourism along the LMT Clusters

#### Akkar & Donniah



Akkar and Donniah cluster is among the most deprived areas of Lebanon. The area is characterized by high poverty rates and declining infrastructure, which significantly impact the quality of life for residents. These two regions are predominantly rural, with widespread farming activities forming the backbone of local economies. Despite the challenges, Akkar and Donniah boast rich natural resources, including the largest forest cover in the country and significant biodiversity. The cultural heritage is also noteworthy, featuring important religious and archaeological landmarks. However, the tourism sector remains underdeveloped, with limited services and facilities that are generally of low to average quality. This is compounded by uncontrolled tourism activities, particularly in key sites like the Qammoua Plateau and the Al Ozer iron oak forest, which puts considerable pressure on the land and natural resources (Error! Reference source not found.).

**Table 4 Tourism Attractions along the LMT Akkar and Donniah Cluster**

Village	Natural Attractions	Cultural Attractions
Menjez	<ul style="list-style-type: none"> <li>• Laurel forest</li> <li>• River stream</li> </ul>	<ul style="list-style-type: none"> <li>• Our Lady of the Fort Convent</li> <li>• Crusaders fortress</li> <li>• Megalith tombs (UNESCO tentative list)</li> <li>• Roman temple</li> <li>• Heritage museum</li> </ul>
Andqet	<ul style="list-style-type: none"> <li>• Oudine Valley and wild pine forest</li> </ul>	<ul style="list-style-type: none"> <li>• Old silk factory</li> </ul>
Qobaiyat	<ul style="list-style-type: none"> <li>• Large mixed forest</li> <li>• Cedars, fir and juniper forests</li> <li>• Butterflies museum</li> <li>• Kamr Chbat Reserve (unmanaged)</li> </ul>	<ul style="list-style-type: none"> <li>• Several old and ancient churches</li> <li>• Old silk factory</li> <li>• Traditional water mills</li> </ul>
Akkar El Atika	<ul style="list-style-type: none"> <li>• Waterfall</li> <li>• Cedars, fir and juniper forests</li> </ul>	<ul style="list-style-type: none"> <li>• Crusaders fortress</li> </ul>
Mechmech	<ul style="list-style-type: none"> <li>• Akkar Trail Association Nature Museum (insects and geological heritage)</li> </ul>	N/A

	• Cedars, fir and juniper forests	
<b>Qemmamine</b>	• Jhannam valley (deepest in Lebanon)	N/A
<b>Kfarbnine</b>	• Cedars forest	• Sheikh Muhammad Mausoleum
<b>Sfireh</b>	• Wild pine forest	• Roman temple
<b>Sir El Donnieh</b>	• Zahlaneh grotto	N/A

Tourism activities that are most commonly practiced in this cluster include hiking, snowshoeing, and camping, reflecting the regions’ strong potential for nature-based and adventure tourism. This potential is matched by high domestic demand for such activities. Despite this, key natural sites like the Karm Chbat nature reserve remain unmanaged, and plans for a nature reserve in the Donnieh Mountains and a national park encompassing Akkar, Donnieh, and Hermel are yet to be implemented. Agriculture plays a crucial role in these regions, with significant production of apples and other fruits. The population is diverse, comprising Maronite Christians and Muslim Sunnites, who live in close-knit rural communities. The combination of high rurality, rich natural and cultural resources, and untapped tourism potential presents both challenges and opportunities for sustainable development in this cluster. (Table 5)

**Table 5 Rural tourism dynamics and stakeholders along the LMT Akkar and Donnieh Cluster**

Village	Active Municipality	Associations & NGOs	Accommodation	F&B	Guides
<b>Menjez</b>	Yes	AFDC Association (environment and forest management)	1 Guesthouse	N/A	N/A
<b>Andqet</b>	No	N/A	<b>1 Guesthouse</b>	2 bakeries	<b>1 Local guide</b>
<b>Qobaiyat</b>	Yes	Council of Environment (environment, culture, and tourism) Insam Association (socio-economic development)	2 lodges along the trails 5 facilities in the village	+10 restaurants and bakeries	<b>1 Local guide</b>
<b>Akkar El Atika</b>	No	N/A	+15 lodges and bungalows (non-formal) in Qammoua plateau	2 restaurants in the village 5 restaurants in Qammoua plateau	N/A
<b>Mechmech</b>	No	<b>Akkar Trail Association</b> (environment, forest management, trails management, and tourism)	1 Guesthouse	2 bakeries	5 local guides
<b>Qemmamine</b>	No	N/A	1 Guesthouse	N/A	<b>1 Local guide</b>
<b>Kfarbnine</b>	No	N/A	1 Guesthouse	N/A	N/A
<b>Sfireh</b>	No	N/A	N/A	N/A	N/A
<b>Sir El Donnieh</b>	No	N/A	1 Hotel	2 restaurants 3 bakeries	N/A

All stakeholders highlighted in Purple cooperate closely with LMTA or have a formal partnership

There are no DMOs in Akkar and Donnieh, and municipal efforts are scattered without any regional integration in terms of tourism and destination development.

## North Lebanon



The districts of Zgharta, Bcharreh, and Batroun form a cohesive cluster characterized by their rich natural resources, significant cultural heritage, and a predominantly Maronite Christian community, especially with the Qadisha UNESCO World Heritage Site, a territory extending over the Zgharta and Bcharreh districts. These districts share a blend of rural charm and growing tourism potential, marked by a mix of traditional lifestyles and modern investments in tourism infrastructure. They each offer unique attractions, from vibrant summer destinations and important religious sites to winter sports and nature-based activities, making them integral parts of the LMT experience.

**Zgharta District:** The Zgharta district, particularly the Ehden area, is a renowned summer tourism destination, celebrated for its vibrant nightlife and summer festivals. Over the years, there has been a noticeable increase in tourism investments, enhancing its appeal. The district is home to the Horsh Ehden Nature Reserve, one of Lebanon’s most critical biodiversity hotspots, offering visitors a unique natural experience. Religious heritage is significant here, particularly for the Lebanese Maronites, with landmarks such as the Qozhaya Valley, which is part of the Qadisha UNESCO World Heritage Site. The area has medium rurality, balancing traditional and modern lifestyles. Zgharta district has an active Union of Municipalities, but there are no efforts to establish a DMO. The Union is working on a joint project with Bcharreh Union of Municipalities for the sustainable management of Qadisha Valley.

**Bcharreh District:** The Bcharreh district is an essential winter destination, hosting the oldest ski slopes in Lebanon. It also attracts summer tourists, thanks to its stunning natural landscapes. One of the main attractions is the Cedars of God forest, a top-visited natural site in Lebanon. The district is rich in religious heritage for the Maronites, featuring the Qannoubine Valley, part of the Qadisha UNESCO World Heritage Site, and numerous historical churches, including the hometown of Saint Charbel. Bcharreh is dotted with traditional villages like Hasroun, Hadath El Jebbeh, and Dimane, which offer a glimpse into the region's cultural and historical past. The area provides fair tourism services and infrastructure, ranging from good to average quality. It is also known for its significant production of apples and other fruits. The community is predominantly Maronite Christians, with medium rurality reflecting a blend of rural charm and tourism development. Bcharreh district has an active Union of Municipalities working towards the establishment of a DMO for the region, as well as the sustainable management of Qadisha Valley, a joint project with Zgharta district.

**Batroun District:** The Batroun district is a hub for nature-based tourism activities, boasting significant climbing sites that attract adventure enthusiasts. It is home to the Tannourine Cedars Nature Reserve, the largest extension of cedar forests in Lebanon. The district features traditional villages like Tannourine, Douma (recognized as the UN’s Best Tourism Village in 2023), and Bchaaleh, known for housing some of the oldest olive trees in the world, dating back

2045 years. Tourism services and infrastructure in Batroun are on the rise, with increasing investments leading to good-quality facilities. The district is also noted for its substantial production of apples and other fruits. The community consists predominantly of Maronite Christians, and the area is characterized by high rurality, maintaining a strong connection to its agricultural roots and traditional ways of life. Batroun district has recently established a DMO, that is still in the process of putting its organizational objectives and strategy.

Together, these districts in the North Lebanon cluster along the LMT offer a diverse and rich tapestry of natural beauty, cultural heritage, and burgeoning tourism potential, making them prime areas for both local and international visitors. (Table 6 &

Table 7)

**Table 6 Tourism Attractions along the LMT North Cluster**

Village	Natural Attractions	Cultural Attractions
Ehden	<ul style="list-style-type: none"> <li>• Horsh Ehden Nature Reserve</li> <li>• Mar Sarkis Mountain</li> <li>• Jouit Water Spring</li> <li>• Mar Sarkis Water Spring</li> </ul>	<ul style="list-style-type: none"> <li>• Al Qubra traditional building</li> <li>• Mar Sarkis Monastery</li> <li>• Oldest Maronite church in Lebanon</li> <li>• Youssef Beik Karam Lebanese Hero statue</li> </ul>
Qozhaya	<ul style="list-style-type: none"> <li>• Qozhaya Valley</li> </ul>	<ul style="list-style-type: none"> <li>• Saint Antonios Monastery</li> <li>• Part of UNESCO Heritage Site in Qadisha valley</li> </ul>
Qannoubine	<ul style="list-style-type: none"> <li>• Qannoubine valley and river</li> </ul>	<ul style="list-style-type: none"> <li>• Our Lady of Qannoubine Monastery</li> <li>• Our Lady of Hawqa Monastery</li> <li>• Other monasteries and caves</li> <li>• All Part of UNESCO Heritage Site in Qadisha valley</li> </ul>
Bcharreh	<ul style="list-style-type: none"> <li>• Cedars of God Forest</li> <li>• Qadisha Grotto</li> <li>• Ski Slopes</li> </ul>	<ul style="list-style-type: none"> <li>• Gibran Khalil Gibran Museum</li> <li>• Old churches</li> <li>• Mar Lichaa Monastery - Part of Qadisha valley</li> </ul>
Bqaa Kafra	<ul style="list-style-type: none"> <li>• Bqaakafra Lake</li> </ul>	<ul style="list-style-type: none"> <li>• Saint Charbel house and Old churches</li> </ul>
Hasroun	<ul style="list-style-type: none"> <li>• Hasroun agricultural lands</li> </ul>	<ul style="list-style-type: none"> <li>• Traditional souk and houses</li> </ul>
Hadath El Jebbeh	<ul style="list-style-type: none"> <li>• Cedars of God forest</li> </ul>	<ul style="list-style-type: none"> <li>• Saint Daniel Old church</li> <li>• Sarcophagi and old Water mills</li> </ul>
Tannourine	<ul style="list-style-type: none"> <li>• Tannourine Cedars Forest</li> <li>• Chatine potholes, Baatara and Balaa</li> </ul>	<ul style="list-style-type: none"> <li>• Old churches and monasteries</li> </ul>
Douma	N/A	<ul style="list-style-type: none"> <li>• Old Souk and Traditional houses</li> <li>• Old churches</li> </ul>
Bchaaleh	<ul style="list-style-type: none"> <li>• Millennial Olive Trees</li> </ul>	<ul style="list-style-type: none"> <li>• Olive Eco Museum related to the olives and olive oil heritage</li> <li>• Bchaaleh archeological site</li> </ul>

**Table 7 Rural tourism dynamics and stakeholders along the LMT North Cluster**

Village	Active Municipality	Associations & NGOs	Accommodation	F&B	Guides
Ehden	Yes	Al Midane Association Ehden Festival <b>Ehden Nature Reserve</b>	4 Guesthouses 3 Hotels 1 Luxury Hotel/Resort 1 Camping	+20 restaurants and bakeries	4 Guides with Ehden Reserve
Qozhaya	N/A	N/A	1 Religious Accommodation	2 bakeries	N/A
Qannoubine	N/A	N/A	1 Religious Accommodation	1 restaurant	<b>1 Local guide</b>
Bcharreh	Yes	Cedars Mountain Association Friends of Cedars Association	+10 mountain resorts and hotels 3 Guesthouses	+15 restaurants and bakeries	<b>1 Local guide</b>
Bqaa Kafra	Yes	N/A	N/A	1 restaurant 2 bakeries	N/A



**Kesrouane District:** The Kesrouane District is a premier winter destination, hosting Lebanon’s largest ski resort and slopes. In addition to winter sports, the district offers summer tourism opportunities, including visits to the Jabal Moussa Biosphere Reserve and the Chabrouh Dam, the highest water reservoir in Lebanon. Kesrouane is known for its diverse and high-quality tourism services and infrastructure. While farming activities have declined, there has been an increase in real estate investment. The district is predominantly Christian Maronite and has low rurality, making it a modern and accessible destination for tourists. Kesrouane district has recently established a DMO, that is still in the process of putting its organizational objectives and strategy.

**Maten:** The Maten District, home to Jabal Sannine, the third-highest mountain in Lebanon, is known for its traditional and picturesque villages such as Baskinta, Khinchara, and Mtein. The district features Lebanon’s first thematic trail, the Baskinta Literary Trail, and offers good tourism services and infrastructure. Baskinta village serves as a hub for social and educational services in the region. Farming activities are present and contribute to the local economy. The district is characterized by its diverse Christian communities, including Maronite, Armenian, Catholic, and Orthodox. With medium rurality, Maten offers a balanced mix of rural charm and modern amenities. Maten district is working towards the establishment of a DMO for the region, with efforts led by the private sector.

The districts of Jbeil, Kesrouane, and Maten provide a rich tapestry of experiences, from winter sports and adventure activities to cultural and religious explorations. Their well-developed tourism infrastructure, combined with their natural beauty and cultural diversity, make them a must-visit destination for anyone looking to experience the best of what Lebanon has to offer. (Table 8 &

Table 9)

**Table 8 Tourism Attractions along the LMT North Mount Lebanon Cluster**

Village	Natural Attractions	Cultural Attractions
Jaj	• Jaj Cedars Nature Reserve	• Old Church • Sculpture workshop and museum
Ehmej	• Ehmej Cedars Forest • Laklouk Ski Resort and Highlands • Fish fossils museum and workshop	• Roman Inscriptions
Aqoura/Mejdel	• Aqoura highlands and juniper forest • Aqoura lakes • Rouies cave	• Roman road • Roman inscriptions • Old and traditional churches
Afqa	• Afqa cave and waterfall • Afqa highlands and juniper forest	• Astarte temple (ruins) • Old mosque
Lassa	N/A	• Old mosque
Hrajel	N/A	• Traditional Phoenician hat making
Faraya	• Chabrouh Water Dam	• Saint Charbel Statue
Kfardebiane	• Natural stone bridge • Ski Slopes and highlands • Iron oak forest	• Roman temple • Old church • Old wine press
Baskinta	• Marj Pine Forest • Bakish plateau • Assi River biodiversity hotspot • Sannine mountain	• Baskinta Literary Trail • Old churches • Sarcophagi
Mtain	• Protected pine forest	• Old ottoman bridge • Traditional houses and old town square • Painting museum

**Table 9 Rural tourism dynamics and stakeholders along the LMT North Mount Lebanon Cluster**

Village	Active Municipality	Associations & NGOs	Accommodation	F&B	Guides
Jaj	No	Jaj Nature Reserve	1 Guesthouse 1 Camping	1 restaurant	1 Local guide

<b>Ehmej</b>	Yes	Ehmej Development Association	1 Resort/Hotel 5 Bungalows/resorts 3 Guesthouses 1 Farmhouse	6 Restaurants 4 bakeries	<b>2 Local guides</b>
<b>Aqoura/Mejdel</b>	No	Aqoura Festival Committee	+10 resorts and hotels 3 Guesthouses 2 Bungalows/resorts	5 restaurants 1 bakery	2 Local guides
<b>Afqa</b>	No	N/A	N/A	N/A	N/A
<b>Lassa</b>	No	N/A	N/A	N/A	N/A
<b>Hrajel</b>	No	N/A	N/A	3 restaurants 2 bakeries	N/A
<b>Faraya</b>	No	N/A	1 Hostel, 1 Guesthouse 1 Camping site, +10 mountain resorts	5 restaurants 5 bakeries	N/A
<b>Kfardebiane</b>	Yes	Beity Association	1 Youth Hostel, 1 Hotel/resort, 1 guesthouse, +10 mountain chalet resorts	10 restaurants 1 winery resto 4 bakeries	<b>2 Local guides</b>
<b>Baskinta</b>	No	Baskinta Baytouna Abdallah Ghanem Cultural	3 guesthouses	5 restaurants, 3 bakeries, 1 host table	<b>2 Local guides</b>
<b>Mtain</b>	Yes	Boukra NGO Mtain Village Forest Reserve	3 Guesthouses	2 Restaurants 3 bakeries, <b>1 host winery resto</b>	<b>2 Local guides</b>

All stakeholders highlighted in Purple cooperate closely with LMTA or have a formal partnership

### South Mount Lebanon



The districts of Baabda, Aley, and Shouf in South Mount Lebanon form a coherent and interconnected cluster. These districts share common features, such as their traditional roles as estivation and summer destinations, proximity to Beirut, picturesque villages, and rich cultural heritage. Their blend of natural beauty, diverse communities of Christians and Druze, and well-developed tourism infrastructure makes them attractive destinations for visitors. (Table 10 &

### Table 11)

**Baabda District:** The Baabda District is known for its traditional estivation and summer destinations. Proximity to Beirut makes it a convenient escape for city dwellers seeking cooler climates and scenic landscapes. The district is home to Jabal Kneisseh Summit and features traditional and picturesque villages such as Falougha and Hammana. Baabda offers good tourism services and infrastructure, ensuring a pleasant stay for visitors. The district has seen a decline in farming activities, with an increase in real estate development. It is home to Christian Maronite and Druze

communities and has a medium level of rurality. Baabda district is working towards the establishment of a DMO for the region, with efforts led by the private sector.

**Aley District:** The Aley District is also a traditional estivation and summer destination, benefiting from its proximity to Beirut. The district is experiencing a partial revival of farming activities, adding to its rural charm. Aley is known for its Christian Maronite, Christian Orthodox and Druze communities, which contribute to its rich cultural tapestry. With low to medium rurality, the district offers a blend of modern amenities and traditional Lebanese hospitality.

**Shouf District:** The Shouf District is a prime destination for rural tourism and ecotourism in Lebanon. It is home to the Shouf Biosphere Reserve, a significant natural landmark in Lebanon and the region. The district features traditional and picturesque villages such as Mokhtara, Maasser El Shouf, and Khreibeh. Shouf offers good tourism services and infrastructure, ensuring a high-quality experience for visitors. The district has seen a revival of farming activities and landscape protection, preserving its natural beauty. Shouf is home to diverse communities, including Christian Maronite, Catholics, and Druze. With medium to high rurality, Shouf provides a rich blend of cultural heritage and natural landscapes. Shouf district has recently established a DMO jointly managed by the Shouf Biosphere Reserve, it is considered the most active and advanced DMO in Lebanon.

**Table 10 Tourism Attractions along the LMT South Mount Lebanon Cluster**

Village	Natural Attractions	Cultural Attractions
Falougha	<ul style="list-style-type: none"> <li>•Mount Kneisseh</li> <li>•Falougha Pine Forsest</li> <li>•Falougha and Kfarselouane water ponds</li> </ul>	<ul style="list-style-type: none"> <li>•Traditional houses</li> <li>•La Martine Valley</li> <li>•First place where Lebanese flag was raised</li> </ul>
Bzebdine	<ul style="list-style-type: none"> <li>•Bzebdine Pine forest</li> </ul>	N/A
Hammana	<ul style="list-style-type: none"> <li>•Hammana Cedars Forest</li> <li>•Chaghour Hammana Water Spring</li> </ul>	<ul style="list-style-type: none"> <li>•Traditional houses</li> <li>•Hammana Old Souks</li> <li>•House where La Martine poet lived</li> <li>•Old Churches</li> </ul>
Ain Dara	<ul style="list-style-type: none"> <li>•Shouf Biosphere Reserve</li> <li>•Village Forests</li> </ul>	N/A
Ain Zhalta		<ul style="list-style-type: none"> <li>•Traditional houses</li> <li>•Old church</li> </ul>
Barouk		<ul style="list-style-type: none"> <li>•Lebanese National Anthem poet house</li> </ul>
Maasser El Shouf		<ul style="list-style-type: none"> <li>•Traditional houses</li> <li>•Old church</li> <li>•Old tiles factory</li> <li>•Old water mills</li> </ul>
Khreibeh		<ul style="list-style-type: none"> <li>•Traditional houses</li> </ul>
Baadaran		<ul style="list-style-type: none"> <li>•Old Serail</li> <li>•Traditional weaving workshop</li> </ul>
Jbaa		N/A
Niha		<ul style="list-style-type: none"> <li>•Prophet Ayoub Shrine</li> <li>•Niha Cliff Fortress</li> </ul>

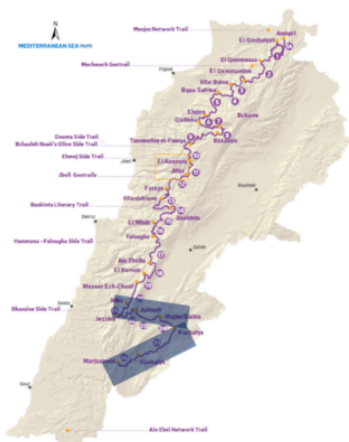
**Table 11 Rural tourism dynamics and stakeholders along the LMT South Mount Lebanon Cluster**

Village	Active Municipality	Associations & NGOs	Accommodation	F&B	Guides
Falougha	Yes	N/A	1 Mountain resort	+10 Restaurants/snacks	1 Local guide
Bzebdine	No	N/A	1 camping site 1 forest bungalows	2 Restaurants	N/A
Hammana	No	Hammana Club Hammana Tourism Committee Hammana Artist House Society for the Protection of Nature	4 Hotels	+15 restaurants, snacks, bakeries	2 Local guides

Ain Dara	No	Shouf Biosphere Reserve Village Cooperatives	N/A	N/A	Shouf Biosphere Reserve Guides
Ain Zhalta	No		2 guesthouses 1 camping site 1 youth hostel	1 Snack	
Barouk	No		3 guesthouses 1 agrotourism 2 hotels 1 camping site 5 bungalows	+10 restaurants 3 bakeries	
Maasser El Shouf	No		3 guesthouses 1 hostel	1 restaurant 2 host tables 1 winery	
Khreibe	No		1 guesthouse	N/A	
Baadaran	No		1 guesthouse	N/A	
Jbaa	No		1 camping site	1 bakery	
Niha	No		1 guesthouse	2 bakeries	

All stakeholders highlighted in Purple cooperate closely with LMTA or have a formal partnership

### South Lebanon & Beqaa



The districts of Jezzine, West Beqaa, Rachaya, Hasbaya, and Marjaayoun form a cohesive and interconnected cluster for the LMT. These districts share common points in their picturesque landscapes, rich cultural heritage, and diverse communities. Their blend of natural beauty, historical significance, and agricultural activities make them captivating destinations for visitors. (Table 12&

### Table 13)

**Jezzine District:** The Jezzine District is renowned as a summer destination, offering a cool retreat with its lush landscapes and forests. It is home to the largest productive pine forest in the Middle East, located in Bkassine village. The district features traditional and picturesque villages like Jezzine and Bkassine, which was recognized as one of the Best Tourism Villages in 2022 by UN Tourism, and offers good tourism services and infrastructure with average to good quality. Although agricultural activities are limited, the Christian Maronite community enriches the district’s

cultural fabric. Jezzine district exhibits medium to high rurality, providing a blend of natural beauty and cultural heritage. Jezzine district has recently established a DMO, that is still in the process of putting its organizational objectives and strategy.

**West Beqaa & Rachaya Districts:** The West Beqaa and Rachaya districts are home to significant landmarks such as Qaraoun Lake, the largest water reservoir in Lebanon, and the historic Rachaya Castle, the birthplace of Lebanese independence. Despite limited tourism services and infrastructure, the districts offer average to good quality experiences. Their proximity to the Mount Hermon Nature Reserve adds to their appeal for nature enthusiasts. These districts have important agricultural activities and are characterized by diverse communities, including Christians, Shiites, Sunnites, and Druze. With medium to high rurality, West Beqaa and Rachaya offer a mix of natural beauty and historical significance, and communities diversity.

**Hasbaya & Marjaayoun Districts:** Hasbaya and Marjaayoun districts offer limited tourism services and infrastructure, with average to good quality. They are known for their important agricultural activities and proximity to the Mount Hermon Nature Reserve. These districts are home to diverse communities, including Christians, Sunnites, and Druze, which contribute to their rich cultural heritage. With medium to high rurality, Hasbaya and Marjaayoun provide a serene and authentic Lebanese experience, blending natural landscapes with cultural depth.

There are no DMOs in the districts of West Beqaa, Rachaya, Hasbaya and Marjaayoun.

**Table 12 Tourism Attractions along the LMT South Lebanon and Beqaa Cluster**

Village	Natural Attractions	Cultural Attractions
Jezzine	<ul style="list-style-type: none"> <li>•Jezzine Waterfall</li> <li>•Jezzine water spring and watermill</li> <li>•Azzibe Waterfall</li> </ul>	<ul style="list-style-type: none"> <li>•Fakhr El Dine Cave</li> <li>•Traditional houses and old Souks</li> <li>•Old churches</li> <li>•Knives making</li> </ul>
Bkassine	<ul style="list-style-type: none"> <li>•Bkassine Pine Forest</li> </ul>	<ul style="list-style-type: none"> <li>•Traditional houses</li> <li>•Old Church</li> </ul>
Aitanit	<ul style="list-style-type: none"> <li>•Qaraoun Lake (polluted)</li> </ul>	<ul style="list-style-type: none"> <li>•Old church</li> </ul>
Majdel Balhis	N/A	<ul style="list-style-type: none"> <li>•Old Mosque</li> <li>•Roman ruins and quarry</li> </ul>
Kawkaba Abou Arab	N/A	<ul style="list-style-type: none"> <li>•Sheikh Fadel Shrine</li> </ul>
Rachaya	N/A	<ul style="list-style-type: none"> <li>•Independence Castle</li> <li>•Old Souks</li> </ul>
Ain Aata	<ul style="list-style-type: none"> <li>•Ain Aara Pine forest</li> </ul>	<ul style="list-style-type: none"> <li>•Sheikh Fadel Shrine</li> </ul>
Kfeir	<ul style="list-style-type: none"> <li>•Kfeir Pine forest</li> </ul>	<ul style="list-style-type: none"> <li>•Prophet Shiit Shrine</li> <li>•Roman ruins</li> <li>•Poet Emilie Nasrallah House and Museum</li> <li>•Old Church</li> </ul>
Hasbaya	<ul style="list-style-type: none"> <li>•Oak forest</li> </ul>	<ul style="list-style-type: none"> <li>•Old souks</li> <li>•Chehab Castle</li> <li>•Caravanserai Souk El Khan</li> </ul>
Ibel El Saqi	<ul style="list-style-type: none"> <li>•Hima protected pine forest</li> </ul>	<ul style="list-style-type: none"> <li>•Old house museum</li> </ul>
Marjaayoun	<ul style="list-style-type: none"> <li>•Marjaayoun Plain</li> </ul>	<ul style="list-style-type: none"> <li>•Village Square</li> <li>•Traditional houses</li> </ul>

**Table 13 Rural tourism dynamics and stakeholders along the LMT South Lebanon and Beqaa Cluster**

Village	Active Municipality	Associations & NGOs	Accommodation	F&B	Guides
Jezzine	Yes	N/A	3 Hotels 3 Resorts 3 Guesthouses	+15 restaurants, snacks and bakeries	1 Local guide
Bkassine	Yes	N/A	1 forest resort 2 guesthouses	1 restaurant 1 bakery	1 Local guide

			1 religious accommodation		
<b>Aitanit</b>	Yes	N/A	1 guesthouse	1 bakery	<b>1 Local guide</b>
<b>Majdel Balhis</b>	No	N/A	N/A	1 bakery	N/A
<b>Kawkaba Abou Arab</b>	No	N/A	N/A	N/A	N/A
<b>Rachaya</b>	Yes	Rachaya Development Association	2 guesthouses 2 hotels	+10 restaurants and snacks	<b>1 Local guide</b>
<b>Ain Aata</b>	No	N/A	N/A	N/A	N/A
<b>Kfeir</b>	No	N/A	1 Camping site		N/A
<b>Hasbaya</b>	Yes	N/A	1 guesthouse	3 restaurants 1 snack 1 bakery	<b>1 Local guide</b>
<b>Ibel El Saqi</b>	No	N/A	1 hotel		N/A
<b>Marjaayoun</b>	No	N/A	1 hotel 1 guesthouse	2 restaurants 2 snacks 2 bakeries 1 winery	N/A

All stakeholders highlighted in Purple cooperate closely with LMTA or have a formal partnership

### III.1.6 Cross Regional Analysis for Rural Tourism along the LMT Clusters

The following matrix summarizes the main challenges and needs, opportunities and potential, market, and strengths and competitive advantages for the five clusters along the LMT.

**Table 14 Cross Regional Analysis for Rural Tourism along the LMT Clusters**

Cluster	Challenges & Needs	Opportunities & Potential	Market	Strength & Competitive Advantages
<b>Akkar &amp; Donnieh</b>	Quality of services Diversity of services	Adventure tourism Ecotourism	Domestic limited to hiking	Wilderness Rurality
<b>North Lebanon</b>	Nature and cultural heritage conservation	Religious tourism Historical tourism Ecotourism Agritourism	Domestic and international market	Religious heritage Qadisha Valley (UNESCO Heritage) Snow based tourism
<b>North Mount Lebanon</b>	Nature and cultural heritage conservation	Religious tourism Historical tourism Geotourism Agritourism	Domestic and international market	Proximity to Beirut Diversity and quality of services
<b>South Mount Lebanon</b>	Integration in regional tourism offer	Ecotourism Agritourism Culinary tourism	Domestic and international market	Integrated value chain under the Shouf Biosphere Reserve Management
<b>Beqaa &amp; South Lebanon</b>	Quality of services Diversity of services	Agritourism Culinary tourism	Limited	Rurality Proximity to Jabal Sheikh Reserve

#### Akkar and Donnieh

The Akkar and Donnieh cluster faces notable challenges in enhancing the quality and diversity of its services. The current tourism infrastructure lacks the necessary standards to meet the expectations of visitors, and there is a need for a wider variety of services to cater to different types of tourists. From accommodation options to dining and recreational activities, the region must improve and diversify its offerings to attract and retain visitors. Despite these challenges, Akkar and Donnieh hold significant potential for adventure tourism and ecotourism. The region's unspoiled natural landscapes, rugged terrain, and unique biodiversity make it an ideal destination for outdoor activities such as hiking, trekking, mountain biking, and wildlife observation. By capitalizing on these natural assets, Akkar and Donnieh can establish themselves as prime locations for eco-friendly and adventure-driven tourism

experiences. Developing sustainable tourism initiatives will not only protect the environment but also create economic opportunities for local communities. Currently, the market for tourism in Akkar and Donnieh is limited to domestic visitors. This presents both a challenge and an opportunity. While the region may not yet attract international tourists in large numbers, focusing on the domestic market allows for the gradual development of tourism infrastructure and services tailored to local preferences. Building a strong domestic tourism base can serve as a foundation for future expansion into international markets.

Akkar and Donnieh possess several strengths and competitive advantages that can be leveraged to boost tourism. The region's wilderness offers a raw, untouched natural beauty that is increasingly rare in a rapidly urbanizing world. This wilderness, coupled with the rurality of Akkar and Donnieh, provides a serene and authentic experience for visitors seeking to escape the hustle and bustle of city life. The rural charm and traditional lifestyles of the local communities add to the region's appeal, offering a unique cultural dimension to the tourism experience.

### **North Lebanon**

The North Lebanon cluster along the LMT is a region blessed with an abundance of natural beauty and cultural heritage. However, this area faces significant challenges, particularly in conserving its rich nature and cultural heritage. The unique landscapes and historical sites are at risk from environmental degradation, urban expansion, and insufficient conservation efforts. Protecting these invaluable assets requires coordinated action and substantial investment in sustainable practices and infrastructure, ensuring that both the natural environment and cultural heritage are preserved for future generations.

Despite these challenges, the North Lebanon cluster holds immense opportunities and potential for tourism development in several sectors. Religious tourism is a promising avenue, given the region's wealth of ancient monasteries, churches, and religious landmarks that attract pilgrims and spiritual seekers. Historical tourism also has strong prospects, as the area is steeped in history, with numerous historical sites and artifacts that can captivate visitors through storytelling and guided tours. Ecotourism is another area with significant potential. The region's stunning natural landscapes, including forests, valleys, and two main nature reserves (Tannourine and Ehden), make it an ideal destination for nature enthusiasts. Activities such as hiking, bird watching, and nature walks can attract eco-conscious travelers who seek to immerse themselves in the natural world. Additionally, agritourism offers a unique opportunity for visitors to experience the region's agricultural traditions. Engaging in farm stays, participating in harvesting activities, and learning about local agricultural methods can provide a memorable and immersive experience for tourists.

The market for tourism in the North Lebanon cluster is diverse, with both domestic and international visitors. The rich cultural and natural heritage appeals to local tourists, while the unique religious and historical sites, combined with the natural beauty of the region, can draw international travelers. By developing tailored marketing strategies and enhancing infrastructure, the region can tap into these diverse markets, ensuring a steady flow of tourists throughout the year. Moreover, the North Lebanon cluster boasts several strengths and competitive advantages that can be leveraged to boost tourism. The region's religious heritage is a significant asset, with numerous religious sites that hold spiritual, historical, and architectural importance. The Qadisha Valley, a UNESCO World Heritage site, stands as one of the region's crown jewels. Its breathtaking landscapes and historical monasteries offer a unique and compelling attraction for tourists. Moreover, the region's mountainous terrain provides excellent opportunities for snow-based tourism, including skiing and snowboarding, attracting visitors during the winter season.

### **North Mount Lebanon**

The North Mount Lebanon cluster along the LMT is a region rich in natural beauty and cultural heritage. However, it faces considerable challenges in conserving these valuable resources. The region's unique landscapes, historical sites, and cultural landmarks are under constant threat from environmental degradation, urban sprawl, and inadequate conservation efforts. Preserving these assets requires concerted efforts and significant investments in sustainable practices and infrastructure. This is crucial to maintaining the integrity of the natural environment and cultural heritage, ensuring they can be enjoyed by future generations. Despite these challenges, the North Mount Lebanon cluster presents substantial opportunities for tourism development. The area is particularly well-suited for religious tourism, given its wealth of ancient monasteries, churches, and other spiritual landmarks that draw pilgrims and religious tourists. Historical tourism is another promising avenue, with the region's rich history and numerous historical sites providing a fascinating backdrop for visitors interested in the past. The region also has significant potential for geotourism, thanks to its diverse geological features and the recent thematic geotrails created by the LMTA. Additionally, agritourism offers visitors the chance to engage with the area's agricultural traditions. Farm stays, participation in harvesting activities, and learning about local agricultural methods provide immersive and educational experiences that connect tourists with the land and its people.

The market for tourism in the North Mount Lebanon cluster is diverse, with both domestic and international visitors. Developing tailored marketing strategies and enhancing infrastructure will be key to tapping into these diverse markets and ensuring a steady flow of tourists throughout the year.

One of the region's significant strengths and competitive advantages is its proximity to Beirut and other tourism hubs such as Byblos and Jounieh coastal cities. This makes it easily accessible for both local and international tourists, providing a convenient escape from the bustling city to the serene mountains. Furthermore, the diversity and quality of services available in the North Mount Lebanon cluster enhance its appeal. From high-quality accommodation and dining options to well-organized tours and activities, visitors can expect a comprehensive and satisfying tourism experience.

### **South Mount Lebanon**

The South Mount Lebanon cluster along the LMT is a region teeming with potential, yet it faces some challenges in integrating itself into the broader regional tourism offer, especially between the three districts forming this cluster, where the Shouf has advanced compared to the two other districts of Aley and Baabda. Ensuring seamless integration and alignment with regional tourism strategies and offerings is vital for maximizing the area's appeal and accessibility. This requires coordinated efforts among local stakeholders, existing and potential DMOs, and the development of comprehensive tourism packages that highlight the unique features of the cluster.

One of the most promising opportunities for this cluster lies in ecotourism with the existence of the Shouf Biosphere Reserve and its extensive and pioneer. Hiking, bird watching, educational tourism and nature exploration can attract eco-conscious travelers looking to immerse themselves in nature while contributing to conservation efforts.

Agritourism presents another significant opportunity. Visitors can experience the region's agricultural heritage firsthand by participating in farm activities, learning about traditional farming techniques, and enjoying fresh, locally-sourced produce. This not only provides an authentic cultural experience but also supports local farmers and promotes sustainable agricultural practices. Moreover, culinary tourism is a burgeoning sector with immense potential in South Mount Lebanon, especially in the Shouf Biosphere Reserve village and along the Food Heritage Trail developed in the area. The region's rich culinary traditions, characterized by the use of fresh, local ingredients, offer

a unique gastronomic experience. Tourists can explore local markets, participate in cooking classes, and savor traditional dishes, creating memorable experiences that connect them deeply with the local culture.

The market for tourism in South Mount Lebanon is both domestic and international. The region's unique blend of natural beauty, cultural heritage, and culinary delights appeals to local tourists seeking a quick getaway, as well as international travelers looking for an authentic and enriching experience. Developing targeted marketing campaigns and enhancing the region's visibility on global tourism platforms will be crucial in attracting a diverse range of visitors.

One of the cluster's significant strengths and competitive advantages is its integrated value chain and the DMO creation in alignment with the Shouf Biosphere Reserve Management. This integrated management approach ensures the preservation of the region's natural and cultural heritage while promoting sustainable tourism practices. The Shouf Biosphere Reserve provides a well-organized framework for managing tourism activities, ensuring that they are conducted in an environmentally and socially responsible manner.

### **South Lebanon and Beqaa Lebanon**

The South Lebanon and Beqaa cluster along the LMT is a region of striking rural beauty and cultural richness. Despite its potential, the region faces significant challenges in improving the quality and diversity of its tourism services. To fully capitalize on its unique offerings, there is a pressing need to enhance the infrastructure and range of services available to visitors. This includes upgrading accommodation options, improving transportation links, and diversifying the range of activities and experiences on offer to cater to different tourist preferences.

Agritourism stands out as a major opportunity for the South Lebanon and Beqaa cluster. The region's agricultural heritage is deeply ingrained in its culture, offering visitors a chance to engage with traditional farming practices. Tourists can participate in seasonal harvesting, visit local farms, and learn about the production of local goods such as olive oil, wine, and honey. This not only provides a unique and immersive experience but also supports local farmers and promotes sustainable agricultural practices. Culinary tourism is another promising avenue for the region. The rich culinary traditions of South Lebanon and Beqaa, characterized by the use of fresh, local ingredients, present an opportunity to attract food enthusiasts. The market for tourism in this cluster is currently limited, which presents both a challenge and an opportunity. While there is a need to expand and attract a broader audience, the region's untapped potential provides a blank canvas for creating unique and tailored tourism experiences, whenever the security and political situation allows it. By targeting niche markets such as eco-conscious travelers and culinary enthusiasts, the South Lebanon and Beqaa cluster can carve out a distinctive space in the tourism landscape.

One of the region's significant strengths and competitive advantages is its rurality. The unspoiled natural landscapes and traditional rural lifestyle offer a stark contrast to urban environments, providing a serene and authentic escape for visitors. The proximity to Jabal Sheikh Reserve, which is under development, can enhance the region's appeal, offering opportunities for nature-based tourism activities such as hiking, bird watching, and nature exploration. The reserve's diverse ecosystems and stunning vistas provide a perfect backdrop for outdoor adventures and ecotourism.

### ***III.1.7 Rural Tourism Strategic Recommendations***

To develop a sustainable and vibrant rural tourism sector along the LMT, several strategic recommendations need to be implemented. These recommendations are prioritized based on their role in conservation, human capital development, institutional and regulatory support, product enhancement, and effective marketing.

#### **A. Conservation and Management**

**A.1 Assess the State of Key Natural and Cultural Heritage Attractions, and Support Their Protection and/or Valorization:** Conducting regular assessments and collaborating with relevant stakeholders to protect and enhance these attractions will preserve the region's heritage and natural beauty, ensuring their long-term sustainability.

**A.2 Monitor Trail Users and Usage Types to Limit Negative Impacts and Increase Positive Impacts:** Implementing a monitoring system will help manage the environmental and social impacts of tourism. This ensures that tourism activities are sustainable and beneficial to local communities.

## B. Human Capital Development

**B.1 Create Business Linkages between Tourism & Hospitality Service Providers, Farmers, Agro-Food Processors, & Craft Makers:** Establishing strong connections between these stakeholders is essential to create an integrated tourism experience. These linkages will ensure that local products and services are available to tourists, enhancing the authenticity of their experience and boosting the local economy.

**B.2 Support Tourism and Hospitality Service Providers in Rural Areas to Invest in Sustainability:** Encouraging investments in renewable energy, water-saving technologies, and other sustainable practices will help minimize the environmental impact of tourism. This can also serve as a unique selling point for eco-conscious travelers.

**B.3 Provide Capacity Building and Training for Tourism & Hospitality Service Providers:** Improving the quality of services through training programs will upgrade the overall tourist experience. This includes enhancing customer service, implementing sustainable practices, and maintaining high standards of hygiene and safety.

## C. Institutional and Regulatory Support

**C.1 Categorize, Standardize, and Establish Quality Control Systems, Labeling Systems, and/or Certification for Emerging Tourism Service Providers:** Implementing quality control and certification systems will ensure consistency and reliability in the services offered. This will build trust and confidence among tourists, encouraging more visitors to choose the LMT.

**C.2 Support the Development of a Regulatory/Institutional Framework for Rural and Alternative Tourism Forms:** Establishing a clear regulatory framework will support the growth of new tourism services and activities, ensuring they meet quality standards and contribute to sustainable development.

## D. Product Development

**D.1 Develop Trail-Related Adventure Tourism Activities Besides Hiking:** Expanding the range of activities to include mountain biking, rock climbing, and wildlife watching will attract a broader audience and encourage longer stays. Emphasizing responsible practices ensures these activities are sustainable and environmentally friendly.

**D.2 Design, Create, Test, and Promote Thematic Itineraries/Routes/Trails and Immersive Experiences:** Developing specialized trails focused on cultural and intangible heritage, religious and faith tourism, and culinary and wine tourism will cater to niche markets. These thematic experiences offer unique and memorable journeys for tourists.

## E. Marketing and Promotion

### ***E.1 Coordinate and Implement Cooperative Tourism Products and Promotional Campaigns with Established DMOs:***

Working with Destination Management Organizations (DMOs) will help create cohesive and compelling marketing campaigns. These coordinated efforts will increase the visibility of the LMT and attract more visitors.

### ***E.2 Promote the LMT and Other Trails as Integrated Destinations for Experiential and Transformational Tourism:***

Highlighting the LMT as a destination for immersive and life-changing experiences will appeal to niche markets, including eco-tourists, adventure seekers, and cultural enthusiasts. This focus on experiential tourism can drive higher engagement and repeat visits.

***E.3 Collect Market Information on Trail Users to Use in Future Marketing and Promotional Campaigns:*** Gathering data on visitor demographics, preferences, and behaviors will inform targeted marketing strategies. This information will help tailor promotional efforts to meet the needs and interests of potential tourists.

By following these prioritized recommendations, the LMTA can develop a robust, sustainable, and appealing rural tourism offer along the trail benefiting local communities, contributing to heritage preservation, and responding to trails users' needs and expectations.

## III.2 Cultural Heritage

### ***III.2.1 Defining Heritage***

Heritage is a broad concept and includes the natural as well as the cultural environment. It encompasses landscapes, historic places, sites and built environments, as well as bio-diversity, collections, past and continuing cultural practices, knowledge and living experiences. It records and expresses the long processes of historic development, forming the essence of diverse national, regional, indigenous and local identities and is an integral part of modern life. It is a dynamic reference point and positive instrument for growth and change. The particular heritage and collective memory of each locality or community is irreplaceable and an important foundation for development, both now and into the future<sup>9</sup>. This general description of heritage encompasses two subgroups (tangible and intangible) each one of them comprises several categories (**Figure 6**).

---

<sup>9</sup> ICOMOS (1999), International Cultural Tourism Charter (Managing Tourism at places of Heritage Significance). Adopted by ICOMOS at the 12<sup>th</sup> General Assembly in Mexico, October 1999. [https://www.icomos.org/images/DOCUMENTS/Charters/INTERNATIONAL\\_CULTURAL\\_TOURISM\\_CHARTER.pdf](https://www.icomos.org/images/DOCUMENTS/Charters/INTERNATIONAL_CULTURAL_TOURISM_CHARTER.pdf)

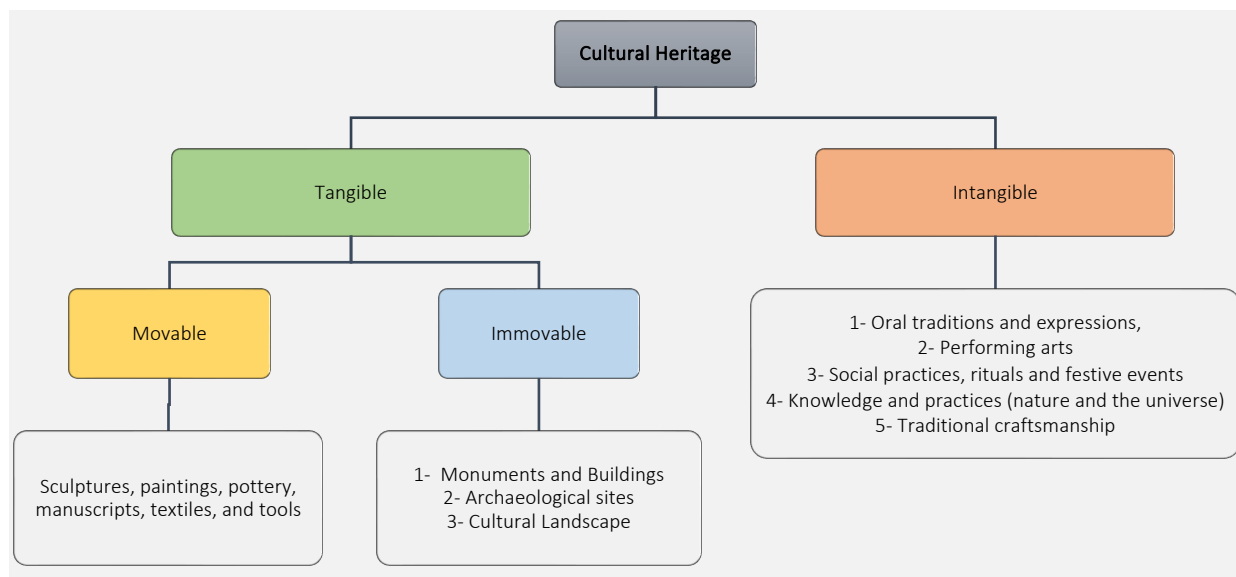


Figure 6 Cultural Heritage Categorization

**Tangible Cultural Heritage (TCH)** refers to physical or material legacy artifacts traces that encompasses a wide variety of elements, it is divided into four categories:

1. **Monuments and Architectural Structures:** This category includes buildings, structures, and architectural complexes constructed by human beings, such as temples, palaces, churches, mosques, bridges, and forts.
2. **Archaeological Sites:** These are locations where evidence of past human activity, such as ancient cities, burial grounds, and settlements, is preserved in the ground or underwater.
3. **Movable Cultural Objects:** This includes portable cultural artifacts, artworks, and artifacts that are created or used by humans, such as sculptures, paintings, pottery, manuscripts, textiles, and tools.
4. **Cultural Landscapes:** Cultural landscapes are geographical areas that have been shaped by human activity and possess significant cultural, historical, or aesthetic value. It expresses the symbiosis between human activity and his environment. Examples include agricultural landscapes, urban historic districts, and sacred sites that hold cultural and spiritual significance.

**Intangible Cultural Heritage (ICH)** means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated with – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity<sup>10</sup>. ICH is divided into 5 categories:

1. **Oral traditions and expressions**, including language as a vehicle of the intangible cultural heritage.
2. **Performing arts.**
3. **Social practices, rituals and festive events.**
4. **Knowledge and practices concerning nature and the universe.**
5. **Traditional craftsmanship.**

<sup>10</sup> UNESCO (2003). Convention for the Safeguarding of the Intangible Cultural Heritage. <https://ich.unesco.org/en/convention>

Although intangible cultural heritage often has tangible objects, artefacts or places associated with it, it is also something different from tangible heritage.... Because intangible heritage is constantly recreated, the concept of “authenticity” applied to *tangible heritage* cannot be used for intangible cultural heritage. The strategies for safeguarding tangible heritage cannot be transferred mechanically to the effort to safeguard intangible cultural heritage, which often requires quite different approaches and methods. Nevertheless, there is the possibility of adopting integrated approaches to safeguarding the tangible and intangible heritage of communities and groups in ways that are “consistent and mutually beneficial and reinforcing”, as the 2004 Yamato Declaration states<sup>11</sup>.

Moreover, since the concept of heritage is in constant evolving process, in recent years UNESCO members added new definitions such as *Living Human Treasures*. It defines “persons who possess to a very high degree the knowledge and skills required for performing or re-creating specific elements of the intangible cultural heritage”<sup>12</sup>. Noteworthy to mention that despite the region’s rich cultural heritage, we should be aware of what modern scholars call **Cultural Amnesia**<sup>13</sup>, a term used to refer to the abandonment of tradition, heritage, community and landscape that occurs when societies have their history and heritage manipulated and targeted by groups that have the ability to exert a certain sense of power or control over them, leading to the loss of collective memory that once bound a community/people together and strengthened their bonds and sense of identity

### III.2.2 Cultural Heritage Stakeholders’ Mapping

The stakeholder mapping and analysis for the cultural heritage sector identifies the various entities and organizations, dealing with cultural heritage in general and especially on the LMT.

**Ministry of Culture (MoC):** A Culture Department was established in 1993 under the Ministry of Higher Education, to become in 2000 the Ministry of Culture. The MoC is constituted of two directorates: The Directorate General of Cultural Affairs, and the Directorate General of Antiquity (

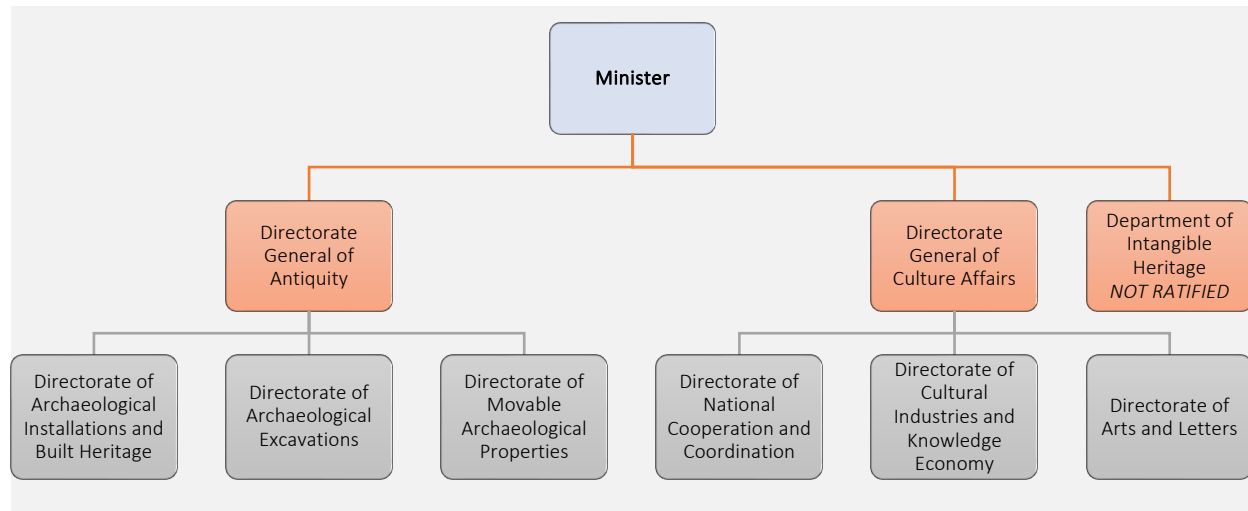
**Figure 7**). These two directorates have the mission of supporting creativity, improving accessibility to art and heritage, alongside creating job opportunities. Moreover, the MoC is the primary repository of a country’s published works and cultural heritage through the National Library, alongside with several other libraries on the Lebanese territories. Three other bodies cover other aspects of the cultural aspects have their own system and work under the MoC: Lebanese National Commission for UNESCO, Lebanese National Higher Conservatory of Music and the international center for Human Sciences.

---

<sup>11</sup> UNESCO (2003), Convention for the Safeguarding of the Intangible Cultural Heritage. <https://ich.unesco.org/en/tangible-and-intangible-heritage-00097>

<sup>12</sup> UNESCO (2002), Guidelines for the establishment of Living Human Treasures systems <https://unesdoc.unesco.org/ark:/48223/pf0000129520>

<sup>13</sup> <https://projects.iq.harvard.edu/whoseculture/cultural-amnesia>



**Figure 7 Ministry of Culture Organizational Chart**

The MoC budget in 2020 was 0.22% of the Lebanese budget. The ministry’s personnel, despite being qualified, get paid limited salaries. There is also a shortage of employees in many departments, resulting in operational obstacles. The ministry dedicates part of its annual budget to the support of cultural. Nevertheless, the granted amounts are small. The Ministry of Culture gets a little interest from the government, there is no real policy at the state level that supplies protection, recognition, and appreciation of cultural heritage and local cultural production<sup>14</sup>. Noteworthy to mention that the General Directorat of Antiquities plays a major in the Heritage field, by developing and enforcing regulations, authorizing and supervising excavations, documenting and safeguarding sites and antiquities and fostering international collaborations.

In contrast, Lebanon failed on two occasions to establish a Department for Intangible Cultural Heritage. Following the implementation of the Mediterranean Living Heritage project (MedLiHer-UNESCO/EU, 2009-2012), an ICH inventory work was launched alongside the creation of the National ICH Register in 2013; both initiatives were accompanied by workshops on capacity-building on national and local level. The inclusion of Al-Zajal on the Representative List of the 2003 Convention (UNESCO) in 2014 was also the result of MedLiHer-UNESCO/EU project. Lebanon seemed to be well on the way to implementing the 2003 Convention. However, several changes at the MoC caused the process to slow down from 2014 during which a decree creating a Department for ICH at the MoC was promulgated (subsequent to the reorganization of the Ministry in 2008). This department has still not been created. In 2016-2017, a project to develop a sectoral cultural policy for safeguarding the ICH proposed a relaunch of activities to implement the 2003 Convention in an ICH Department to be created at the Ministry of Culture, as well as draft legislation that, once adopted, would regulate the safeguarding of the ICH. This draft, put under consideration at the MoC in December 2017, has not been adopted.

In short, Lebanon has made great strides in implementation since ratifying the Convention in 2003. However, its irregularity and dependence on international subsidies, notably from UNESCO, are due to the absence of an institutional entity and laws, preventing it from having a cumulative effect and inscribing the safeguarding of ICH on a national scale in continuity<sup>15</sup>.

<sup>14</sup> Agenda Culturelle (2016), Culture in Lebanon by 2020: State of Play <http://backend.institutdesfinances.gov.lb/wp-content/uploads/2020/06/Culture-in-Lebanon-BY-2020-State-of-Play-2016.pdf>

<sup>15</sup> UNESCO (2022), Periodic Report (Lebanon) on the Convention (Cycle 2020-2024), Report Submitted on 15/12/2022 and examined by the Committee in 2023. <https://ich.unesco.org/en/state/lebanon-LB?info=periodic-reporting>

**Other State Institutions:** Many state institutions play a role or have a role to be played in organizing and developing the cultural sector in Lebanon:

- The Ministry of Tourism has the role of organizing festivals and promoting archeological sites.
- The Ministry of Interior and Municipalities has the power of registering applications from associations, especially cultural ones. Moreover, it oversees the work of municipalities, notably at the cultural level.
- The Ministry of Education awards certificates in arts and culture.
- The Ministry of Foreign Affairs is responsible for Lebanese culture and art events abroad.
- The Ministry of Social Affairs is in charge of crafts.
- The Ministry of Agriculture and the Ministry of Environment share responsibilities related to the Natural Resources and Landscape.
- The Ministry of Finance is the main stakeholder, since it is the last link in the decision-making process in terms of releasing sums for the implementation of governmental policies, including cultural ones.

**Municipalities:** Municipalities' role includes the support of cultural activities, they can establish or help establish and organize festivals and village celebrations, run museums, libraries, movies, cultural and social clubs, parks, and sport venues. Therefore, they are concerned and aware of their responsibilities in the cultural field, despite their small potentials. According to the principle of vertical delegation of authority, municipalities are the most capable of defining cultural policies in lines with their geography and population, based on the geographic particularities of cultural demand and government action capabilities in this area.

**DMO's:** Newly established in Lebanon, DMO's haven't yet had the chance to play a role, but DMOs serve as catalysts for sustainable cultural tourism development, balancing economic growth with the preservation of cultural heritage assets. Their role is instrumental in ensuring that cultural treasures are protected, celebrated, and accessible for future generations to appreciate and enjoy.

**Academic and Research Institutions:** Universities, research institutes, and scholars contribute to the study, documentation, and conservation of cultural heritage through research, academic programs, publications, and collaborations with communities and other stakeholders. Notable universities conducting research and publishing about cultural heritage include: The Lebanese University, American University of Beirut, Saint Joseph University of Beirut, Lebanese American University, University of Balamand, Holy Spirit University Kaslik, Beirut Arab University.

**Local Communities:** local communities are the primary custodians of the TCH and principal practitioners of the ICH. They provide valuable insights into the historical significances, traditions and stories associated with heritage assets and they play a pivotal role in transmitting traditions, knowledge, and skills across generations. Their involvement is crucial for ensuring the authenticity and sustainability of cultural practices. Heritage preservation is crucial for local communities since it helps them maintain a sense of continuity and belonging and allow them to generate economic opportunities

**Cultural Institutions (Museums, Archives):** Museums serve as custodians of TCH and ICH. They collect, preserve, interpret, and display artifacts, documents, and traditions to educate the public and provide researchers documentation about cultural identity and history.

The Agenda Culturelle has listed 102 museums in Lebanon<sup>16</sup> among which 7 are to be found on the LMT (Menjez heritage house museum, ornithology, Rhopalocera and Zoology Museum (Qobayat), Gibran Khalil Gebran Museum (Bcharre), Boutros Farha Museum in Jaj, Abdallah Ghanem Museum (baskinta), Mtein museum for arts, Beit touyour ayloul museum (Emilie Nasrallah) Kfour). Most of these museum stems from personal or private initiatives and are owned and managed by Individuals, families, or non-profit organization and they deal with a broad spectrum of topics ranging from heritage to culture, arts, religion and nature. Noteworthy to mention that we have listed several museums that do not occur in the agenda Culturelle's list such as the Mar Qozhaya Museum (Qadisha), Eco-Museum of the Olive Tree Culture (Bchaale), Douma heritage museum, Fish fossils museum (Ehmej) and the Norwegian ethnographic museum (ibl es-Saqi). Similar to previous ones, these museums are also the fruit of personal/private initiatives and are owned and managed the same way.

**Religious Institutions:** Religion is an essential component of the Lebanese identity and plays a major role in the daily life of the Lebanese population, shaping their culture and traditions. Religious monuments and traditions can be found in every village making the religious institutions a primary custodian and a key player in heritage preservation and promotion. The role played by religious communities in the creation, maintenance, and continuous shaping of sacred places, and the custodial role played by them in caring for these as living heritage is undeniable. Inscribed on the UNESCO's World Heritage List since 1998 and considered as an OUV (Outstanding Universal value), the Qadisha valley reflects the importance of religion in Lebanon's history and expresses the role played by religious institutions in the preservation of cultural heritage. Their role ranges from collecting, documenting, preserving, and displaying artifacts into educating the public and enhancing researches about religious identity, history and traditions.

**Non-Governmental Organizations (NGOs):** NGOs dedicated to cultural heritage advocacy and conservation work alongside governments and communities to raise awareness, provide technical expertise, and implement projects for the protection and promotion of both tangible and intangible heritage. Some NGO work on a national scale (ICOMOS Lebanon, Nahnoo, Biladi, Silat for culture, Association for the Protection of the Lebanese Heritage, APSAD, Food Heritage Foundation....) while others are dedicated to local scale (Association Qannoubine for mission and heritage, Friends of the Cedar Forest, Qannoubine Heritage Association, Douma Club, Doumanian National Lady's Committee, Bchaaleh Trails Association, Noa's Olive Protection Association, Baskinta Baytouna and Suburbs, Jroudna, Association for the Protection of Jabal Moussa...).

**International Organizations and Donors:** International organizations such as UNESCO and other donor agencies (EU, AFD, USAID, AICS, World Bank, ...) provide expertise, guidelines, and financial support for safeguarding and promoting cultural heritage. They facilitate cooperation between countries and promote best practices in heritage conservation.

**Media:** conventional alongside digital and social media plays an undeniable role in the dissemination of awareness and the promotion of cultural heritage. They foster appreciation and advocate for their conservation. However Increased visibility through media often leads to a surge in tourism thus affecting negatively the TCH. Moreover, digital media offers an unprecedented access to cultural artifacts and sites worldwide (virtual tours, digital archive...)

The following table presents a summary of all the stakeholders involved in TCH and ICH management with their respective roles (**Table 15**).

<sup>16</sup> <https://www.bamleb.com/guide/museums?query=%7B%7D>

**Table 15 Stakeholders Role in TCH and ICH Management**

Category	Stakeholder	Tangible Heritage	Intangible Heritage
Public	Ministry of Culture, DGA	Authority (Management and/or Protection and/or Maintenance and/or Access Control) of listed Monuments, Buildings and Archaeological sites.	Intangible cultural heritage Department (not ratified yet).
	Ministry of Social Affairs	N/A	Crafts makers
	Ministries of Culture, Environment and Agriculture, and sometimes Tourism.	Different forms of Cultural Landscape Protection <i>Ministry of Tourism (Promotion and Marketing, Support to Festivals)</i>	
Academic	UL, AUB, LAU, USJ, USEK, UOB, NDU, BAU	Research, Documentation, Valorization, University Museums, Events	
Civil Society	+20 National NGOs +50 Local NGOs/Clubs at village level.	Research, Documentation, Valorization, Projects Implementation and Management <i>Events &amp; Festivals</i>	
Municipalities, Union of Municipalities	Around 5% of Lebanon's municipalities, and around 5 municipalities along the LMT	Valorization, Management, Access Control ( <i>under supervision of DGA and support from donors</i> )	Preservation, Valorization, Events, Festivals
DMO's	5 on the LMT	Preservation, Valorization and promotion	
Religious	Christian churches, Religious Orders	Preservation, Documentation, Valorization, Management, Access Control Museums, Feasts, Festivals	
	Muslim owned sites and heritage elements		
	Druze owned sites and heritage elements		
Private	Private Owners	Museums, Heritage Houses, Buildings, Sites, Collections	
Media	Private owners	Promotion, awareness and new technologies (visits and archive)	

### III.2.3 General findings

Lebanon's heritage is a living record for its rich history, cultural diversity, and timeless traditions. The country's geographical position turned him into a crossroads for ancient civilizations, thus shaping it by with several influences spanning over several millennia and drawing an indelible mark on the country's landscape and identity. Despite this advantageous situation, Lebanon's heritage hasn't yet been subject to an in-depth assessment. Nevertheless, several initiatives took place in the last 20 years either thematic or on a small scale.

Several factors affect heritage preservation, especially the unsettling gaps in jurisdiction and enforcement of laws, both meant to safeguard cultural heritage. These deficiencies not only jeopardize the integrity of historical treasures but also challenge the very essence of our commitment to preserving collective heritage. Understanding the intricate web of jurisdictional issues and the faltering application of laws becomes crucial in addressing these critical shortcomings.

Lebanese Heritage laws exist since 1930's when antiquities legislations were enacted. These laws dealt with several aspects such the definition of antiquity, property, protection...<sup>17</sup> These laws were subject to modification through time especially following the civil war and the creation of the Ministry of culture and its emancipation in 2000. On the International level, Lebanon has ratified several UNESCO conventions, among which the convention for the protection of the world cultural and natural heritage in 1983 while the last was in 2007 when the government accepted the convention for the safeguarding of the Intangible heritage and the convention on the protection of the underwater cultural heritage<sup>18</sup>.

In 2016 the Lebanese government issued a decree (2016/3065) to legalize movable objects in private collections and include them in the national register. The decree was welcomed with great enthusiasm but the covid pandemic, the explosion of Beirut port and the economic crisis halted the process. Noteworthy to mention, the national register is not available for public

Also, in 2016, the Strategic Road Map of the MoC. Strategic Priorities, Objectives and Initiatives considered *crafts, folklore, cuisine and languages* as priorities to ICH, nevertheless, none of the initiatives proposed mentioned the definition of regulations and laws for safeguarding ICH. Moreover, this strategy has remained unimplemented. In 2019, the project "Strengthening capacities for the effective implementation of the 2003 Convention of the Safeguarding of the Intangible Cultural Heritage in Lebanon" (2019-2022), funded by Japan and implemented by the Beirut Regional Office for UNESCO and NatCom, refurbished the implementation of the 2003 Convention. Several workshops took place to revitalize the capacity building and integrate new members into the Lebanese network for safeguarding ICH. In September 2022, this project led to the formulation of a new strategy which has yet to be discussed and approved at national level<sup>19</sup>.

Lebanon's multidimensional testimonies are gradually degrading for several reasons mainly due to human neglect and/or natural factors. They all require urgent attention and protection by all of us. Two out three immovable aspects (Monuments and Buildings and Archaeological sites) are under the authority of the Directorate General of Antiquities (DGA). Cultural landscape is a shared responsibility between the Ministry of culture and the Ministry of agriculture.

As for Intangible Heritage, up to this date, no legal frame, no regulations and no national register. Nevertheless, since 2011 UNESCO office in Beirut alongside several stakeholders have undertaken several initiatives for building<sup>20</sup> and strengthening<sup>21</sup> capacities for the effective implementation of the 2003 Convention of the Safeguarding of the Intangible Cultural Heritage in Lebanon. Moreover, the Register of the Intangible Cultural Heritage of the Mediterranean -part of the iHeritage project an initiative (Instrument "Mediterranean Sea Basin Programme") funded by the European Neighborhood Instrument - established, under the direction of Prof. Annie Tohme Tabet and the supervision of the Chamber of Commerce, Industry and Agriculture of Beirut and Mount Lebanon (CCIABML) an inventory of 50 Lebanese ICH elements<sup>22</sup>.

<sup>17</sup> Abdul Massih J & Panayot-Haroun N (2013), An Assessment of the Lebanese Heritage law from the Twentieth to the Twenty-first Century in Karageorghis V. and Bakirtzis Ch. (ed.) *From Protecting the Cultural and Archaeological Heritage of the Mediterranean Region: Legal Issues*, Published by Foundation Anastasios G. Leventis, Nicosia, Cyprus.

<sup>18</sup> <https://www.unesco.org/en/countries/lb/conventions>

<sup>19</sup> UNESCO (2022), Periodic Report (Lebanon)

<sup>20</sup> <https://ich.unesco.org/en/events/capacity-building-workshop-on-the-implementation-of-the-intangible-cultural-heritage-convention-00164>

<sup>21</sup> <https://ich.unesco.org/en/projects/strengthening-capacities-for-the-effective-implementation-of-the-2003-convention-of-the-safeguarding-of-the-intangible-cultural-heritage-in-lebanon-00413>

<sup>22</sup> <https://iheritage.ccib.org.lb/wp-content/uploads/2024/02/ICHLEBANONEN.pdf>

In a report made by the British council (2022)<sup>23</sup> about the situation of Cultural Heritage protection in Lebanon, it was highlighted the inaccuracy of the understanding of CH among the Lebanese population. The report states that "Most of the respondents believe in the importance of protecting and preserving archaeological and heritage assets", it also specifies that the participant have visited main archaeological sites but few has visited museums. Curiosity to know the past and expanding their knowledge were the main reasons behind getting attracted to CH. Also, the majority of the participants thinks that the government is responsible for protecting archaeological and heritage assets and they consider that "More budget should be allocated by the government to preserve CH... since they believe that archaeology and heritage do contribute to the country's economy".

Box 1: Relevant results revealed by the British Council Report (based on 400 respondents)

- 45% cited archaeological sites as first choice for tangible heritage (historical buildings come 2nd with 21%)
- 37% cited culinary arts as first choice for intangible heritage (traditions/folklore comes 2nd with 27%)
- 85% consider traditions useless and irrelevant for modern life
- 86% consider that traditional houses have nothing to add to their knowledge about his ancestors
- 72% consider contemporary architecture as more practical and less polluting than traditional architecture
- 52% responded that they have retrieved their knowledge of cultural heritage from their parents while 6% collected it from scientific papers

According to the UNESCO Periodic report (2020-2024)<sup>24</sup> The characteristics of the elements included in the National Register of Intangible Heritage must correspond to the definition of this heritage set out in Article 2 of the 2003 Convention. In addition to the general specifics of ICH, the criteria for inclusion in a multicultural country like Lebanon must help promote respect for cultural diversity and human creativity. Only intangible cultural heritage that complies with existing international instruments on human rights, mutual respect between communities, groups and individuals, and sustainable development is therefore taken into consideration".

It is evident that Cultural Heritage in Lebanon is passing through a crisis period, namely when it comes to its identification, valorization, protection, and dissemination, as well as its transmission unharmed for future generations. Several factors are accentuating the problem among which:

1. Fragile and lack proper strategic governance (lack of government resources (financial and human); weak legal systems, including enforcement; inadequate heritage protection strategy and policies; lack of access to training in modern methods and technologies; insufficient/ineffective coordination between the central and local government and the civil society organizations).
2. Geographical position: in a high-risk area.
3. The ongoing economic and financial crisis.
4. The 4th of August Beirut blast exacerbated the situation.
5. CH is not a priority whether for local authorities or for funding agencies.
6. Agricultural expansion, urban development, and unregulated constructions posed a high pressure on the immovable CH.
7. Illicit excavations and trafficking.
8. Climate change.
9. Ignorance and the neglect.

<sup>23</sup> British Council (2022), Situating Heritage Programme Report, [https://www.britishcouncil.org.lb/sites/default/files/situatingheritage\\_programmepreport\\_may2022.pdf](https://www.britishcouncil.org.lb/sites/default/files/situatingheritage_programmepreport_may2022.pdf)

<sup>24</sup> UNESCO (2022), Periodic Report (Lebanon) on the Convention (Cycle 2020-2024), Report Submitted on 15/12/2022 and examined by the Committee in 2023. <https://ich.unesco.org/en/state/lebanon-LB?info=periodic-reporting>

Additionally, few of the implemented projects responded to local needs. There is no balance of funding between projects targeting systemic impact and local/individual impact. Should also be mentioned, the lack of sustainability and ability to maintain the impact and sustainable results of many implemented projects.

The present report is not a data bank but a diagnosis on the current state of Lebanon's cultural heritage with recommendation for its sustainable preservation and promotion in the future. It is noteworthy to mention that heritage elements must possess significance, whether local or national. However, in the absence of local policies and regulations to determine such attributions, they are listed without regard to their significance. In this report, we have not listed all heritage elements, but rather those we consider most significant, although some lists may appear exhaustive. Some archaeological ruins and stone bridges, tombs (including rock-cut tombs or cavities), sarcophagi, lime kilns, water sources, and water mills, can be found in every village and along every path, therefore they are not listed. While other elements with high value or associated with specific contexts, are documented. As for the intangible heritage elements listed, we have documented a wide range that we consider expressive and meaningful.

The following table summarize the main challenges and threats facing the TCH and ICH along the LMT (Table 16).

**Table 16 Main Challenges and Threats on TCH and ICH along the LMT**

TCH Challenges and Threats	ICH Challenges and Threats
Rapid urbanization and unchecked development leading to destruction or alteration of historic buildings and archaeological sites.	Modernization, globalization, and changing lifestyles leading to the erosion of many traditional practices.
Armed conflict and political instability resulting in damage/destruction of monuments, museums, historic sites, and looting/ illegal trafficking of cultural artifacts.	Historical internal displacement and migration due to conflicts or economic necessity disrupts the transmission of intangible cultural heritage within communities.
Neglect and lack of maintenance due to insufficient funding and lack of maintenance leading to deterioration of structures, loss of historical integrity, and eventual collapse and loss.	
Environmental factors and natural disasters such as floods, climate change issues affecting the physical damage to buildings and sites, accelerated decay of materials, and erosion of landscapes.	Lack and insufficient efforts in documenting and researching intangible heritage.
Uncontrolled tourism and mass tourism in some key sites leading to damages and fragile structures, vandalism, and littering.	
TCH and ICH Common Challenges and Threats	
Inadequate legal and institutional frameworks, and insufficient or poorly enforced laws.	
Absence of strategies coupled with actions.	
The ongoing economic and financial crisis.	
Insufficient attention and funds (Not a priority for local authorities or funding agencies).	
Human pressure in terms of beliefs and misconceptions.	
Lack of education and awareness about the importance of intangible cultural heritage.	

### III.2.4 Cultural Heritage Projects and Initiatives

Cultural Heritage Projects and Initiatives play a pivotal role since they are dedicated to the identification, preservation, and dissemination of our collective cultural heritage. They attempt to safeguard historical sites, artifacts, and traditions, ensuring their appreciation by present and future generations alike. By fostering community engagement and scholarly research, these projects aim to sustain cultural identity and heritage for years to come.

Heritage projects and initiatives, can be divided in two groups, local and national level: On the local level the most notable are those aiming to map and safeguard cultural heritage in villages and they are primarily carried out either by municipalities, as seen in Menjez and Jezzine or initiated by local communities through NGOs, as exemplified in Bchaale and Douma. Other initiatives are undertaken by individual for academic reasons such as the CH mapping in Qornayel, Kfar Selwan-Falougha by Rana Dubeissy from the Lebanese University. On the national level two projects are worth to mention, first the project designed and developed by Nahnoo to map (Figure 8) and regulate crafts can be considered a typical model to follow. The second is the Food Heritage Foundation aiming to promote and preserve culinary traditions through several initiatives mainly Darb el Karam.

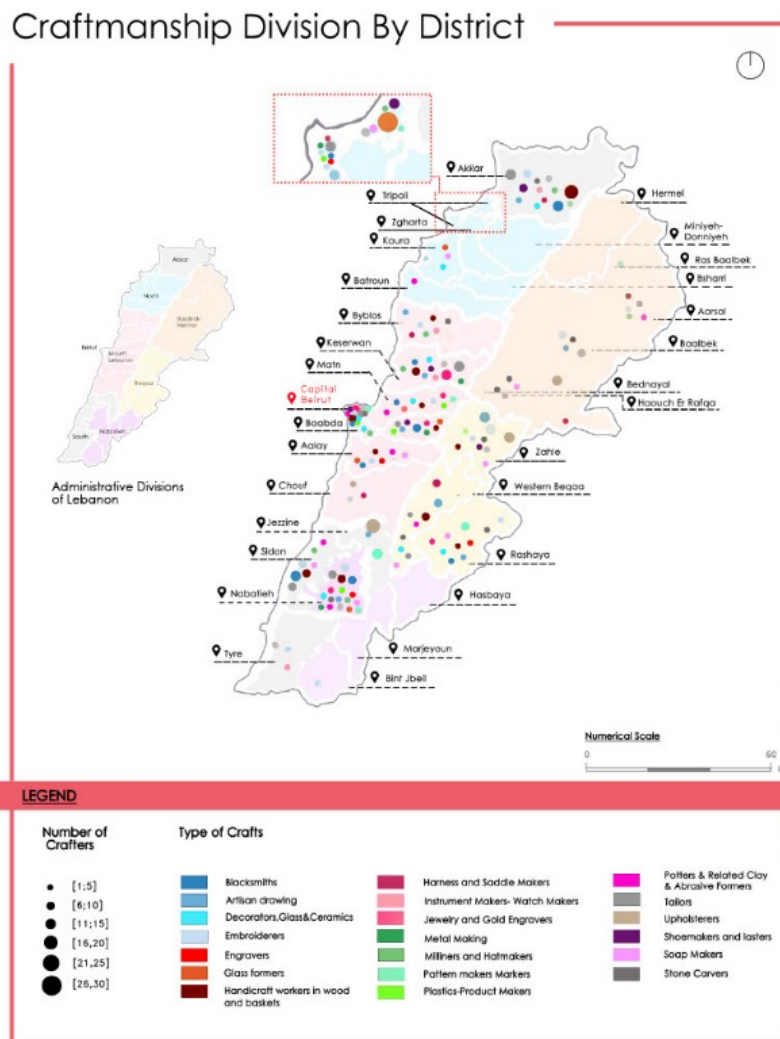


Figure 8 Map of crafts in Lebanon (courtesy of Nahnoo)

Academic research is an integral component in heritage preservation; nevertheless, few studies have focused on cultural heritage, especially in rural areas. One village’s (Ibl es-Saqi) Cultural landscape has been analyzed in an academic paper<sup>25</sup>. Also, one village (Jezzine) is subject to an in-depth study and analysis of its CH<sup>26</sup>. Finally, some religious aspects of ICH had been analyzed in several academic papers especially pilgrimage and rituals<sup>27</sup>.

Noteworthy to mention is that most cultural heritage projects and initiatives focus on archaeological excavations, which receive the lion’s share (Figure 10).

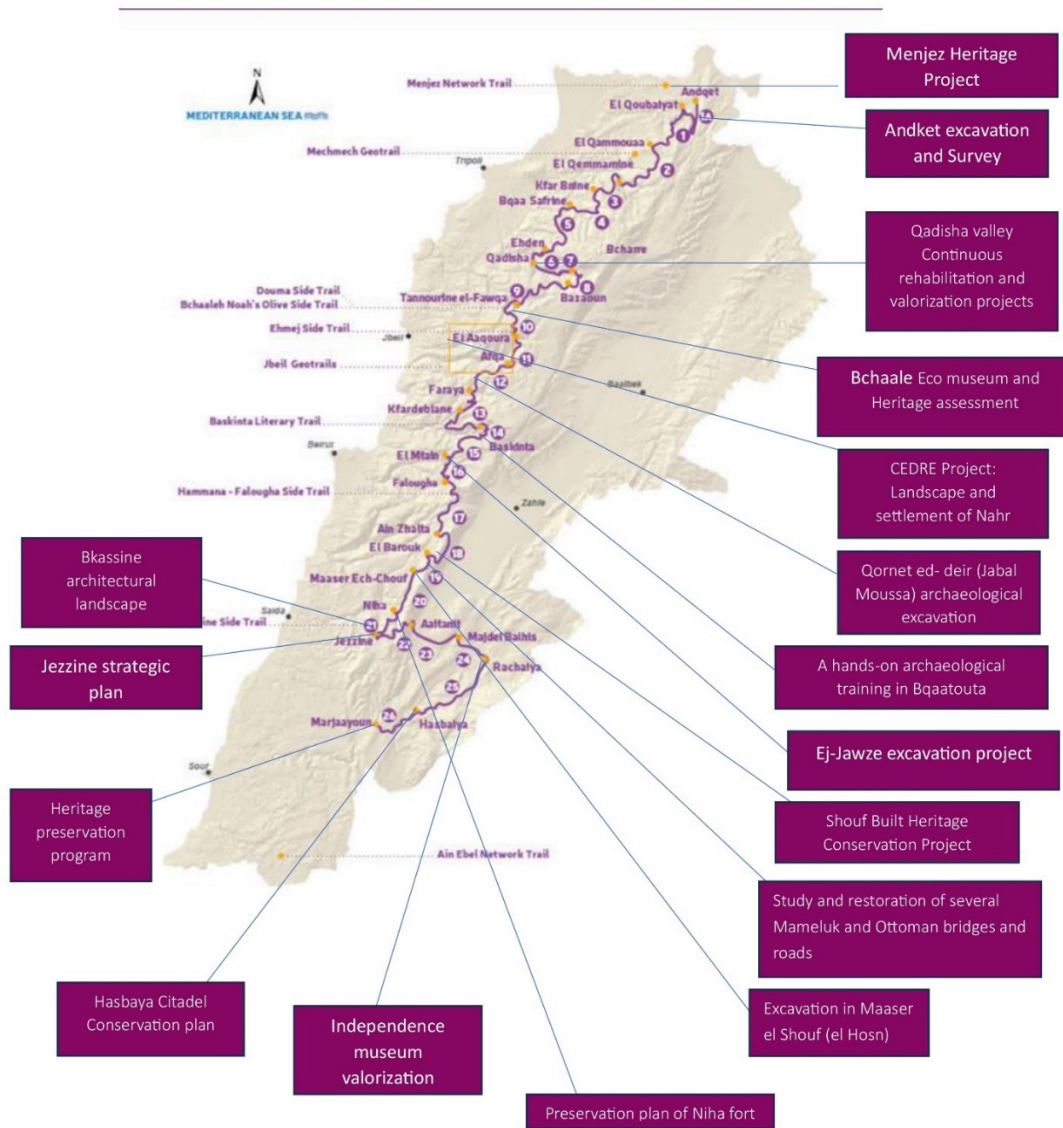


Figure 9 Heritage initiatives on the LMT (last 10 years)

<sup>25</sup> Jala M. Makhzoumi (2009) Unfolding Landscape in a Lebanese Village: Rural Heritage in a Globalising World, International Journal of Heritage Studies, 15:4, 317-337, DOI: 10.1080/13527250902933793  
<sup>26</sup> PhD Thesis by Marie-Claire Andraos: Vers une approche ascendante du processus de patrimonialisation – Cas de Jezzine, expected defense September 2024 – USJ under the supervision of Liliane Barakat  
<sup>27</sup> <https://lu-lb.academia.edu/NourFarraHaddad?nbs=user>

### Previous (the last 10 years) and Ongoing Initiatives

- General study about the Paleolithic period in Lebanon (Revive): Tracing Homini Occupations of and Migrations through the Levant (reviving paleolithic research in Lebanon) Led by Sireen el-Zaatari, University of Tubingen
- Menjez heritage Project. UNESCO tentative list: Excavation and surveys in Menjez and its surroundings
- Andqet: Excavation and surveys
- Qadisha: Continuous projects for the rehabilitation and valorization of the Qadisha Valley under the supervision of the UNESCO
- Qadisha: Excavation and restoration (Mar Asia)
- Qadisha: Restoration (Deir el Salib)
- Hadshit (Wadi houlat): Conservation and restoration to Mar Challita and Mar Youhana
- Ecomuseum and Heritage assessment in Bchaale (Bchaale trail)
- Nahr Ibrahim Valley: CEDRE Project for the Nahr Ibrahim Valley, led by Romana Harfoush
- Qornet ed-Deir cultural trail and archaeological excavation - Jabal Moussa, a Lebanese University -AUB project
- Mtein (Ej-Jawze): Excavation (IFPO- Beirut)
- A hands-on archaeological training (educational program) led by Alia Fares (LMTA member) at *Blata site* in Bqaatouta
- Heritage assessment project focusing on women’s role in rural context (Lebanese University) led by Rana Dubeissy in Qornayel, Kfar Selwan and Falougha
- Shouf Biosphere reserve is piloting several initiatives:
  - - ASMED - Exchange of experiences in the Mediterranean region - from Italy to the Shouf
  - - IFEEL - Implementing community-based food security while enhancing the agricultural sector, protecting the environment, and adapting to climate change in Lebanon
  - Assessment of the archaeological potential of the Upper Shouf
  - Study and restoration of several Mamelouk and Ottoman bridges and roads
  - Shouf Built Heritage Conservation Project
  - Preservation plan of Niha fort
  - Excavation in Maaser el Shouf (el Hosn)
  - Inauguration of handicrafts and embroideries workshop in Khreibe
- Jezzine strategic plan
  - Regional Natural Park
  - Preservation plan for Haret Kanaan, Saint Joseph church and Fakher Ed-Din grotto
  - PhD thesis : vers une approche ascendante du processus de patrimonialisation – Cas de Jezzine (M. C. Andraos), end of 2024 – USJ under the supervision of Liliane Barakat
- Your Home Never Felt So Natural program by the Municipality of Bkassine to enhance the architectural landscape.
- Independence museum valorization and 3D reconstruction (in preparation)
- Conservation plan for the Hasbaya Citadel a project developed by the Lebanese Foundation for the Preservation of the Emir Shehabi Citadel–Hasbaya
- The Food Heritage foundation through Darb el Karam-west Bekaa (Aitanit) promotes and preserve heritage with focus on culinary traditions.
- Marjeyoun Heritage preservation program by the Municipality of Marjaayoun.

### III.2.5 Cultural Heritage along the LMT clusters

Heritage clusters on the LMT represent more than just a collection of heritage element; they embody the rich mixture of cultures, traditions and knowledges that have been shaped by the local communities through generations. These clusters serve as focal points where history comes alive, offering a glimpse into the past while enriching our understanding of cultural diversity. From ancient ruins nestled in agricultural landscapes to timeless sites teeming with religious piety and iconic architecture, each cluster tells a unique story of human ingenuity and resilience. By exploring those heritage clusters, we delve into the significance of these elements as custodians of collective memory. By preserving and celebrating our cultural heritage, these clusters not only educate and inspire us but also foster a sense of pride and belonging among local communities.

#### Akkar & Donnieh

The region of Akkar is characterized by the presence of a relatively large coastal plain in the west and high mountains to the east. The latter fosters the LMT and crosses Akkar el Aatiqa, Menjez, Qobayat, Andqet, Meshmesh. As for Donnieh, it is mainly a mountainous region located in a large valley between the Makmel Mountains to the south and the Akkar Mountains to the north; the valley may be the largest in the Middle East, with its highest peaks "Qornet es-Sawda " and the deepest valley "Wadi Jahannam". Alike other regions in Lebanon, farming and agricultural activities are widespread in Akkar and Donniye. This cluster has a rich tapestry of nature and heritage, it boasts diverse natural landscapes and offers a spectacular view of valleys, rivers, and forests. Her rich and dense forests provide a habitat for wildlife and a serene backdrop for outdoor activities. The natural environment supports a rich biodiversity. The region's rivers and streams also host diverse aquatic life, contributing to its ecological significance. This picturesque region is known for its agricultural productivity. It benefits from the snowy mountains providing it with vital water resources for agriculture, contributing to the region's agricultural prosperity. Archaeological sites and historical landmarks scattered throughout the landscape reflecting its importance over the centuries. Home to a mosaic of cultures and traditions its villages. Local communities in this section struggle to preserve their heritage. Those two regions are the most deprived areas of Lebanon with high poverty rates and declining infrastructure. Nevertheless, they embody a harmonious blend of natural wonders and cultural heritage and encompass several features that can be found nowhere else in Lebanon. (Table 17 & Table 18)

**Table 17 TCH elements in Akkar and Donnieh LMT Cluster**

TCH Main Category	Classification	Elements	Area/Village(s)
Archaeological sites	Prehistoric	Megalith tombs (Dolmens) (UNESCO tentative list Ref.: 6430)	Menjez
	Roman & Medieval	Nemesis Roman Temple	Menjez
		Roman religious complex in Sfire	Sfireh
		Mar Saba shrine (Roman ruins) – Andqet	Andqet
		Crusader fortress (Felicium Castle)	Menjez
		Crusader fortress (Gibelacar)	Akkar el Atiqa
Religious	Convent/monastery	Our Lady of the Fort Convent (Saydet el Qal'a)	Menjez
		Mar Elias	Andket
	Church	Mar Daniel (Black church, basalt)	Menjez
		Mar Challita church (reuse of roman temple stones)	Qobayat
		Religious landscape (+ 10 churches)	Qobayat
	Mausoleum	Sheikh Muhammad Mausoleum	Donnieh
Architecture		Traditional mountain architecture	Qobayat and Donnieh
		Vernacular architecture (black stone houses)	Menjez
		Sir Palace Hotel Building	Donnieh
Ethnographic and museums		Black volcanic stones sculpture	Menjez
		Silk Factory and traditional mills	Andqet and Qobayat
		Heritage museum	Menjez
		Museum for Animals, Birds and Butterflies	Qobayat

	Agricultural landscape	All villages
--	------------------------	--------------

**Table 18 ICH elements in Akkar and Donnieh LMT Cluster**

ICH Category	Elements	Area and Village(s)
Oral traditions and expressions	Turkish speaking community	Aidamoun
Performing arts	Traditional Lebanese and Arabian “Dabkeh” dance	Qobayat and Donnieh
	Zajal chanted poetry (Listed UNESCO ICH)	Qobayat and Andket
	Traditional chants ‘Ataba	Akkar villages
Social practices, rituals and festive events	Traditional mountain dresses	Donnieh
	Traditional religious chants	Donnieh
	Religious feasts and social traditions	All villages
	Qobayat Festival and Reef Rural Festival	Qobayat
	Mawlid, spiritual religious song or praise of the Prophet	Donniye villages
	Olive culture and traditions	Villages with olive plantations
Culinary heritage and local products	Ambarize/Serdale cheese	Donniye
	Chanklish & Arishe	Qobayat
	Arak distillation	Andket and Qobayat
	<ul style="list-style-type: none"> <li>• Man’oushe (Listed UNESCO ICH)</li> <li>• Dairy products: Local cheeses</li> <li>• Tannour and Saj bread making</li> <li>• Hrisseh dish</li> <li>• Bulgur and lentils-based dishes</li> <li>• Apple based traditions and products.</li> <li>• Olive products and oil</li> <li>• Rose water production</li> <li>• Traditional food preservation processes (Moune’ making)</li> </ul>	Most of the villages
Knowledge and practices (nature and the universe)	Agricultural practices (ploughing, irrigation, harvest, trimming...)	Most of the villages
	Bawahir (traditional weather forecasting methods)	
	Edible wild plant harvest	
	Traditional charcoal making	
	al Qaida el Qamariye (moon phase rule)	
Proverbs about weather, seasons, months, nature and sky		
Traditional craftsmanship	Olive oil soap	Most of the villages with olive plantations
	Tapestry craft/rugs weaving	Aidamoun
	Upholsterers	Akkar el Atika
	Embroiderers	Andket
	Weaving traditions	Some villages

### North Lebanon

This North Lebanon region encompasses the district of Bcharreh, Zgharta, and Batroun, boasts a heritage landscape that is both historically rich and scenically breathtaking. Nestled amidst the rugged terrain of the Mount Lebanon range, this area has been shaped by centuries of human habitation and cultural interaction. Famous for its charming villages with their traditional stone houses adorned with red-tiled roofs, old churches offer a glimpse into Lebanon's rural heritage, characterized by its distinctive religious history.

This cluster encompasses an UNESCO World Heritage Site “The Qadisha Valley and the Cedar of God Forest” (**Figure 10**). The Qadisha valley referred to as the Holy Valley, is a UNESCO World Heritage site renowned for its stunning natural beauty and historical significance. Carved out by the Qadisha River, this deep gorge has served as a refuge for monks and hermits since early Christianity, housing numerous rock-cut monasteries, chapels, and hermitages clinging to its cliffs. The majority of the sites are located inside natural caves. (**Table 19, Table 20 Table 21**)

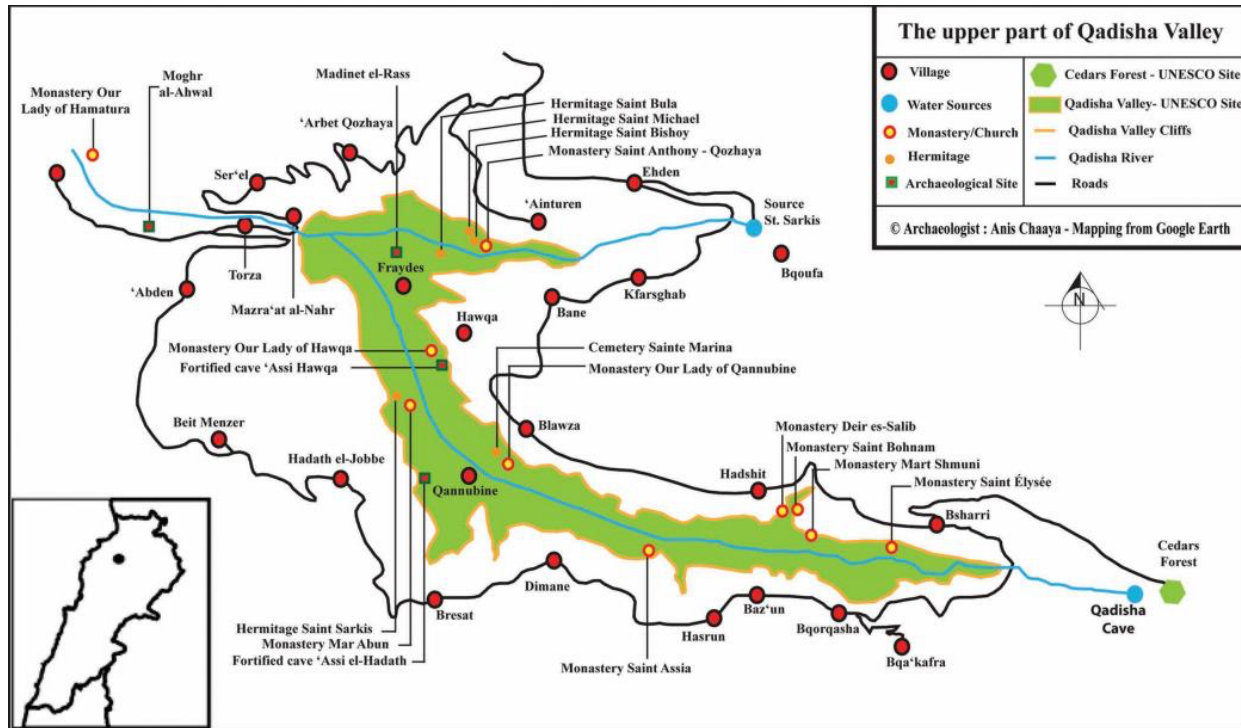


Figure 10 Upper Qadisha Valley Map

Table 19 TCH elements in North Lebanon (Qadisha Valley) LMT Cluster

TCH Main Category	Classification	Elements	Area/Village(s)
Archaeological sites	Prehistoric	Moghr El Ahwal (Natufian)	Within Qadisha valley (Qadisha and Qannubine)
		Mar Challita cave (Paleolithic)	
		Assi Hawqa (Paleolithic)	
	Roman & Medieval	Mar Estfan grotto	
		Assi Hawqa grotto	
		Madinet el rass (ruines)	
		Romano-Byzantine tombs - Torza	
		Assi Hawqa	
		Monastery of Saydet Hawqa,	
		Assi El Hadath grotto	
		Hermitage Mar Assia	
		Delmas grotto	
Monastery of Mar Youhana			
Religious	Convent/monastery	Monastery of our lady of Qannoubine	
		Mar Lichaa Monastery	
		Monastery of Mar Gerges	
		The Monastery of Mar Aboun and the Hermitage of Mar Sarkis	
		Deir es-Salib Monastery	
		Monastery-Hermitage of Mar Semaan	
		Monastery of Mar Antonios Qozhaya	
		Monastery of our Lady of Hawqa	
	Church	Chapel of Mart Chmouna/i,	
		Chapel and Hermitage of Mar Asia	
Architecture		Hundreds of traditional houses and mansions	
		Mountains vernacular architecture	
Ethnographic and museums		Mar Qozhaya Museum	
		Agricultural landscape	
		Grotto of Assi el Hadath	

The villages Fraidis and Qannoubine have yielded the remains of settlements dated to the Roman and medieval periods. The valley’s rugged slopes are dotted with ancient terraces, orchards, and vineyards, reflecting centuries-old agricultural practices that have shaped the landscape. In this valley religious and natural heritage are intrinsically related. More than 100 religious sites (monasteries, churches, hermitages, tombs, and necropolis) are documented. Their construction Highlight multiple building methods allowing a protection from water and wind erosion, some of them (Mar Lichaa and Mar Antonios Qozhaiya) display a unique technique of construction with lead sheets used as binders in the church façade. Home for several Christian sects from early Christianity until 16<sup>th</sup> century (when the Maronites became the dominant sect), this diversity is attested by several languages used within the valley. Moreover, alongside its religious role, the valley played an essential role in the development of education and culture, as the first printing press in the Middle East was brought to the valley in 1585. “The Cedar of God Forest” known locally as *Horsh Arz el-Rab*, stands as a timeless symbol of Lebanon's natural heritage and cultural identity. Located in the northern part of the country, this ancient forest is home to some of the oldest cedar trees in the world, with a history that spans millennia. These majestic trees, *Cedrus libani*, have long been revered for their significance in Lebanese history, literature, and religion. They are mentioned in the Bible and ancient texts dating back to the Phoenician era, symbolizing strength, resilience, and longevity. The Cedars of Lebanon serves as a national emblem and a source of pride for the Lebanese people. Beyond their cultural and symbolic importance, the Cedars of Lebanon are a vital ecological treasure. They thrive in the harsh conditions of the Lebanese mountains, withstanding extremes of temperature and precipitation. Their dense, fragrant wood has been prized for millennia, used in construction, shipbuilding, and religious ceremonies.

**Table 20 TCH elements in North Lebanon (villages surrounding the Qadisha Valley) LMT Cluster**

TCH Main Category	Classification	Elements	Area/Village(s)
Archaeological sites	Roman	Hadrian forest inscriptions	Tannourine, Bchaaleh, Douma,
		Phoenician (Byzantine period) tomb	Bcharreh
		Roman Statue in Mar Romanos church	Hadshit
		Al-Hoson (ruins)	Bchaale
		Roman Aqueduct	Tannourine
		Ruins	Tannourine el Faouqa
	Medieval	Greek Inscription	Douma (village square)
		Ain El Raha valley and its ruins shrines (Roman-Byzantine and Medieval)	Tannourine
		One of the oldest Christian Arabic inscriptions in Lebanon (found in Bqoufa)	Ehden, - Tomb of the Franjiye family
		Medieval frescoes	Wata Houb
Religious landscape	Convent/monastery/church	The religious landscape of the villages surrounding the valley	Bcharre, Hasroun, Hadath el Jebbe...
		Ehden religious landscape (+10 religious monuments: churches, Shrines, convents...)	Ehden
		House of Saint Charbel	Bekaakafra
		Tannourine religious landscape (+ 50 religious monuments: churches, Shrines, convents...)	Tannourine
		Bchaale religious landscape (1 cathedral, 1 old church and several old religious monuments)	Bchaale
Architecture		Hundreds of traditional houses and mansions	All villages
		Mountains vernacular architecture	All villages
		Old traditional souks (and 240 traditional houses classified National Heritage)	Douma
Ethnographic and museums		El-Kettle, el-Kubra & el-Midan (with its old Souk) neighborhoods	Ehden
		Gibran Khalil Gibran Museum	Bcharre
		Douma village history museum	Douma
		Agricultural landscape, terraces, and practices	All villages

	Eco-Museum of the Olive Tree Culture	Bchaale
--	--------------------------------------	---------

Alongside “The Qadisha Valley and the Cedar of God Forest”, this sector houses the villages of Tannourine, known for its natural and historic landmarks. Its Cedar reserve is one fourth the Cedar areas in Lebanon. The village played a significant religious role for some time and therefore it fosters an important religious landscape (+50 monuments). Douma, a picturesque village renowned for its charming well-preserved traditional Lebanese houses with red-tiled roofs, historical significance, and natural beauty. Bchaaleh, which is surrounded by hills and olive groves. The village is known for its scenic beauty and millennial olive trees and rich history. These villages exemplify the charm and cultural richness of rural Lebanon, offering visitors a glimpse into the country’s historical past, traditional architecture, and warm hospitality amidst a stunning natural setting.

The heritage landscape of North Lebanon is not only a testament to the region’s rich history and cultural diversity but also a sanctuary of natural beauty, offering visitors a unique blend of historical sites, traditional villages, and breathtaking mountain vistas.

**Table 21 ICH elements in North Lebanon LMT Cluster**

ICH Category	Elements	Area and Village(s)	
<b>Oral traditions and expressions</b>	Syriac language and local Lebanese dialect around Qadisha	Most villages	
<b>Performing arts</b>	Traditional Lebanese “Dabkeh” dance	All villages	
	‘Ataba chant	All villages	
	Zajal chanted poetry (Listed UNESCO ICH)	All villages	
	Religious feasts and social traditions in all villages	All villages	
<b>Social practices, rituals and festive events</b>	Traditional mountain dresses	Most villages	
	Ehdeniyat International Festival	Ehden	
	Cedars International Festival	Bcharre	
	Olive cultures and traditions	Bchaale	
	Apple cultures and traditions	Most villages	
	Bread in a lithic oven -	Ehden	
<b>Culinary heritage and local products</b>	Religious feasts and social traditions in all villages	All villages	
	Kebbeh (bulgur-based dishes)	Ehden	
	Jebne Darfiye (type of cheese)	Ehden	
	Loukoum	Douma	
	Olive products and oil	Bchaale	
	<ul style="list-style-type: none"> <li>• Man’oushe (Listed UNESCO ICH)</li> <li>• Dairy products (Chanklish, arishe and local cheese)</li> <li>• Maakroun bi Toum dish</li> <li>• Mjadret Fassoulya</li> <li>• Arak distillation</li> <li>• Bulgur and lentils-based dishes</li> <li>• Hrisse dish</li> <li>• Apple based products</li> <li>• Traditional food preservation processus (Moune)</li> <li>• Saj bread making</li> </ul>	All villages	
	<b>Knowledge and practices (nature and the universe)</b>	Bwahir (traditional way to forecast weather)	Most villages
		al Qaida el Qamariye (moon phase rule)	Most villages
Proverbs about weather, seasons, months, nature and sky		Most villages	
Edible wild plant harvest		All villages	
Traditional charcoal making		Most villages	
al Qaida el Qamariye (moon phase rule)		Most villages	
Agricultural practices (ploughing, irrigation, harvest, trimming...)		All villages	
Transhumance practice		Bcharre	
<b>Traditional craftsmanship</b>	Stone masons	Hadshit	
	Wood handicraft	Bcharre	

### Northern Mount Lebanon

This area is formed by 3 districts (Jbeil, Kesrouane and Matn). It shares the same similitude naturally and culturally to the previous one. Situated among the rugged mountains of Mount Lebanon, this region has been influenced by centuries of human settlement and cultural exchange. Every and each village has its own legacy, heritage and traditions. Spawning over several millennia and covering all eras, visitors, hikers and locals would encounter on every corner a religious monument, Christian or pagan, tombs cut in the rock or inside a cavity, inscriptions which may be visible or may require some efforts to find them, water mill, vernacular houses of several dimensions, cisterns, remains of human interventions that shaped the natural landscape. (Table 22 & Table 23)

**Table 22 TCH elements in North Mount Lebanon LMT Cluster**

TCH Main Category	Classification	Elements	Area/Village(s)
Archaeological sites	Prehistoric	Roueiss grotto	Aqoura
	Roman & Byzantine	Hadrian forest inscriptions (the biggest concentration of inscriptions +100) <sup>28</sup> (Figure 11)	Most villages
		Roman and religious complexes	Fagra, Machnaqa, Afqa, Yanouh (kharayeb)
		Roman roads	- Jbeil (and its coast) to the Beqaa (Baalbeck) via Ehmej and Aqoura toward Yammoune - Jbeil (and its coast) to the Bekaa (Baalbeck) via Mcheti and Qehmez, and the passage of Mnaytra toward Bouday
		Mar Edna and Mar Hanna sites	Aqoura
		Remains and ruins	Mghaira & Lassa
		Byzantine church ruins	Kfadebian
		Mar Youhana el Azraq	Yanouh
		Msaika Roman Tower	Mtein
		Ej-Jawze	Mtein
		water source inscription and its surrounding	Ain el Qabou
		Qalaat Semaan	Ain el Qabou
		Dahr el Khrab	Beqaatet Kanaan
		Funerary ruins	Bqaatouta
	Medieval and Ottoman	Ruines and remains	Aqoura, Yanouh, Mghaira and Lassa
		Qalaat al-Mnaytra (le Moinestre)	Mnaytra
		Saif El Dawla Cave in	Baskinta
		Old Serai (Falougha Municipality)	Falougha
		Bridges	Qornayel, Mchikha (Mtein)
Religious	Religious landscape of Ehmej (+7 churches)	Ehmej	
	Chruch of the lord (Knisset er-Rabb) and Mar Abda	Jaj	
	Religious landscape of Baskinta (+12 Chruches, convents and shrines)	Baskinta	
	Religious landscape of Aqoura (+40 churches, convents and shrines)	Aqoura	
Architecture	Literary Trail (+ 10 attractions including Mikhael Nouaimi Mausoleum and Rock of Tanios "Amin Maalouf" novel sites)	Baskinta	
	Hundreds of traditional houses and mansions	All villages	
	Mountains vernacular architecture	All villages	
Ethnographic and museums	Salwa Rawda Shoukeir	Ras el Maten	
	Painting Museum (Mtein Municipality Museum)	Mtein	
	Mikhael Naime museum	Baskinta	
	Sculpture workshop and museum	Jaj	
	Fish fossils museum	Ehmej	

<sup>28</sup> The actual number of Hadrian Forest inscriptions is about 220. The present map dates back to 1980. Breton J.-F. (1980), Inscriptions grecques et latines de la Syrie T. VIII/3: Les Inscriptions forestières d'Haddrien dans le Mont Liban, BAH 104.

	Agricultural landscape	Most of the villages
	Silk factory	Ehmej

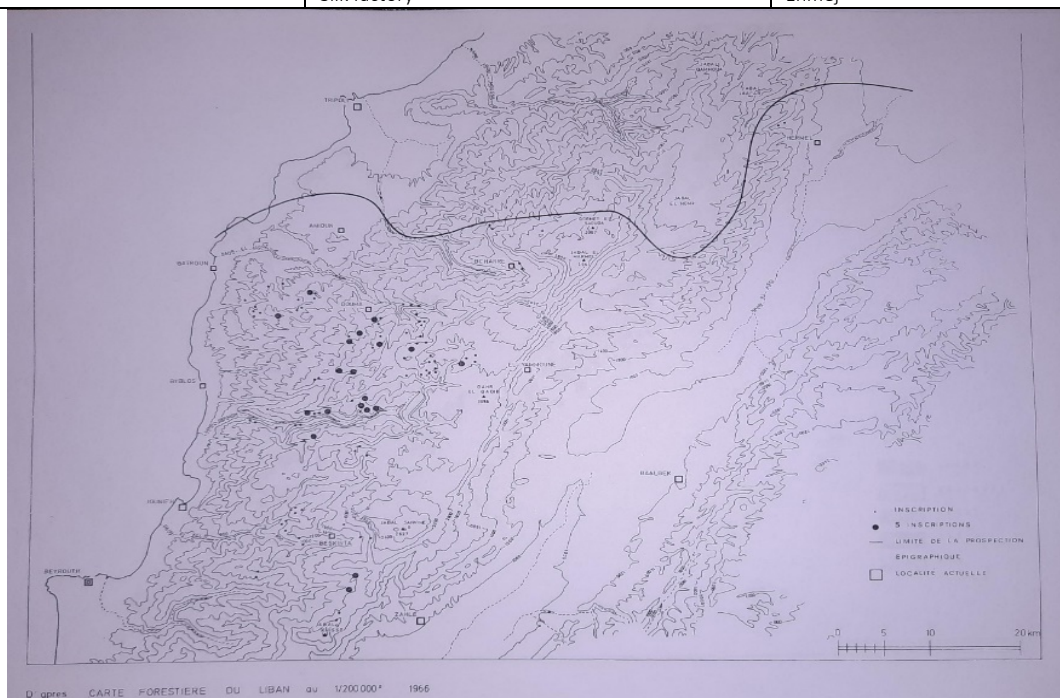
Figure 11 Hadrian inscription according to Breton (1980)<sup>29</sup>

Table 23 ICH elements in North Mount Lebanon LMT Cluster

ICH Category	Elements	Area and Village(s)
Oral traditions and expressions	N/A	N/A
Performing arts	Traditional Lebanese "Dabkeh" dance	All villages
	'Ataba traditional chant	All villages
	Zajal chanted poetry (Listed UNESCO ICH)	All villages
Social practices, rituals and festive events	Hrajel Festival	Hrajel
	Religious feasts and social traditions	All villages
	Mzaar Summer Festival	Kfardebian
	Faqra International Festival	Faqra
Culinary heritage and local products	Chamamit with Rice	Maten area
	<ul style="list-style-type: none"> <li>• Man'oushe (Listed UNESCO ICH)</li> <li>• Arak distillation</li> <li>• Apple related traditions</li> <li>• Traditional food preservation processus (Moune)</li> <li>• saj bread</li> <li>• Bulgur and lentils-based dishes</li> <li>• Olive picking and olive oil extraction</li> <li>• Dairy products (Keshek and cheese)</li> <li>• Hrisse dish</li> </ul>	All villages
Knowledge and practices (nature and the universe)	Transhumance practice	Aqoura
	Bwahir (traditional way to forecast weather)	Most villages
	Edible wild plant harvest	Most villages
	Proverbs about weather, seasons, months, nature and sky	Most villages
	al Qaida el Qamariye (moon phase rule)	Most villages
	Agricultural practices (ploughing, irrigation, harvest, trimming...)	All villages
Traditional craftsmanship	Traditional Phoenician hat making	Hrajel
	Stone masons	Ehmej

<sup>29</sup> Breton J.-F. (1980), Inscriptions grecques et latines de la Syrie T. VIII/3 : Les Inscriptions forestières d'Hadrien dans le Mont Liban, BAH 104

Renowned for its picturesque villages and bustling local markets, it provides a window into Lebanon's rural past. For centuries, diverse religious traditions have shared this land, creating a rich mosaic of religious beliefs and a unique multicultural society. Its strategic position between the main centers (Beirut and Byblos) and Baalbek (the main religious complex in the Levant) during the Roman period, make it possible to become an important passage between those sites. Moreover, the region's richness and importance made possible the concentration of Roman temples and forest inscription. The natural landscape of this region is rich as much as her archaeological. Several nature reserves are located in this sector. The proximity of this sector to Beirut and its dense archaeological legacy facilitated archaeological interventions, allowing the highest number of archeological interventions in upper Mount Lebanon.

### South Mount Lebanon

Covering the south-western range of Mount Lebanon, this cluster stretches from Falougha, (Matn district) in the north to Niha (shouf district) in the south. The Shouf Biosphere Reserve covers most of this section (From Ain-Dara to Niha). This section played a major role in the history of Lebanon by housing the political and administrative authority of Mount Lebanon between the 16<sup>th</sup> and early 20<sup>th</sup> century. Alongside its natural resources, agricultural landscape is predominant in this region for its abundance of water sources; agriculture plays a major role in the lives of its population, mainly olive, grapes, apple and other seasonal fruit trees. The region's wealth in timber has made it accessible and exploited since antiquity. Its strategic position and proximity to coastal cities (Sidon and later on Beirut) made it an important passage between the coast and the Bekaa from the 3<sup>rd</sup> millennium and onward, especially during the Mameluke and Ottoman period, as evidenced by their roads, bridges and control fortresses (such as Niha fortress). Home to several historic villages, it features traditional Lebanese architecture and has a rich cultural heritage. The Druze community, whose distinct cultural practices and beliefs have shaped the area's identity, blended with Maronite traditions shaping the region's singular identity. It has witnessed various historical events and conflicts, contributing to its historical importance in Lebanon's history. The cultural landscape of the Shouf Mountains is a harmonious blend of history, tradition, and natural beauty, offering visitors and residents alike a glimpse into Lebanon's diverse cultural tapestry and its deep-rooted connection to its landscapes. (Table 24 & Table 25)

**Table 24 TCH elements in South Mount Lebanon LMT Cluster**

TCH Main Category	Classification	Elements	Area/Village(s)
Archaeological sites	From the Bronze Age until the Roman period	Qalaat el Hosn/Blaaya (Bronze Age and Persian)	Maaser el Shouf
		Hosn el Semqaniya (Bronze and Iron Age)	Semqaniye
		El Borj and Shqif el-Lawz (Bronze Age)	Barouk/Fraydis
		Qasr Swayjani (Hellenistic)	Kahlouniye
		Machqir-Baadaran (Persian and Hellenistic)	Baadaran
		Bmohray ruins (Roman)	Bmohray
	Mameluke and Ottoman	Mameluke road linking Saida to the Bekaa	Via Gharifa, Batloun, Barouk, Ain Zhalta toward Qab Elias (in the Bekka), crossing several bridges in Gharife, Birket el Aarous (Ain Qani), Baddi (Moukhtara)
		Bridges	Hammana, Niha
		Junblat family serail	Khreibe
		Cliff Fortress (Tyron cave)	Niha
Religious	Churches	Protestant church (previously a <i>Maani</i> citadel)	Ain Zhalta
		Old churches	Falougha, Hammana, Ain Zhalta Maasser El Shouf and Baadaran
	Mosque	Old Mosque	Moukhtara
	Shrine	Prophet Ayoub	Niha
	Funerary	Jewish cemetery	Ain Zhalta

<b>Architecture</b>	Hundreds of traditional houses and mansions	All villages
	Mountains vernacular architecture	All villages
	Old Serail	Baadaran
	Mezher Palace	Hammana
<b>Ethnographic and museums</b>	Agricultural landscape	All villages
	First place where Lebanese flag was raised	Falougha
	Lebanese national anthem poet's (Rachid Nakhle) house	Barouk
	Saint Michael Covenant (converted into a bed and breakfast)	Maaser el Shouf
	Village square	Hammana, Bmohray, Ain Zhalta, Maasar el Shouf, Niha
	La Martine's house	Hammana
	Old souks	Hammana
	Water mills	Niha, Maaser el Shouf, Ain Qani

Table 25 ICH elements in South Mount Lebanon LMT Cluster

ICH Category	Elements	Area and Village(s)
<b>Oral traditions and expressions</b>	Druze Lebanese-Arabic dialect	Druze villages
<b>Performing arts</b>	Traditional Lebanese "Dabkeh" dance (Masser El Shouf, Dabkeh Festival)	All villages
	Zajal chanted poetry (UNESCO ICH)	All villages
	'Ataba Traditional chants	All villages
<b>Social practices, rituals and festive events</b>	Hammana cherry festival	Hamana
	Religious feasts and social traditions in most of the villages	All villages
	Druze traditions (e.g. Matteh Drinking, Traditional Clothes)	Druze villages
	Jabalna Festival	Maasser el Shouf
	Cherry picking	Some villages
<b>Culinary heritage and local products</b>	<ul style="list-style-type: none"> <li>• Man'oushe (UNESCO ICH)</li> <li>• Dairy products (mainly Anbarize/Serdale cheese and Keshek especially the green keshek)</li> <li>• Local dishes from wild herbs collection (e.g. Aaqoub)</li> <li>• Grape molasses</li> <li>• Apple related tradition</li> <li>• Olive related tradition</li> <li>• Arak distillery</li> <li>• Hrisse dish</li> <li>• Saj bread making</li> <li>• Bulgur and lentils-based dishes</li> <li>• Rose water</li> <li>• Traditional food preservation processes (Moune)</li> </ul>	All villages
<b>Knowledge and practices (nature and the universe)</b>	Bawahir (traditional way to forecast weather)	Most villages
	al Qaida el Qamariye (moon phase rule)	Most villages
	Proverbs about weather, seasons, months, nature and sky	Most villages
	Edible wild plant harvest	Most villages
	Agricultural practices (ploughing, irrigation, harvest, trimming...)	All villages
	al Qaida el Qamariye (moon phase rule)	Most villages
<b>Traditional craftsmanship</b>	Handicrafts and embroideries	Khraybe and Jbaa
	Traditionnel Carpenter	Maasser el Shouf
	Old tiles factory	Maasser el Shouf
	Wood Handicraft	Barouk, Maaser el Shouf

### South Lebanon & Beqaa

This is the southernmost part of the LMT. It encompasses the region of Jezzine and the southern part of West Bekka as well as the region of Marjaayoun. In contrast to the previous regions, it is a rich and diverse region geographically, culturally and religiously. It is divided into 3 different zones. Jezzine-Bkassine, Aitanit-Rachaya-Hasbaya, Ibl es-Saqi-Marjaayoun. The natural landscape takes you from Mount Lebanon to the West Bekaa plain, dominated by Mount Hermon (Jabal el Cheikh), and from there to the hills of the Marjaayoun.

The LMT crosses the Bkassine Pine forest (biggest in Lebanon) as well as the Qaraoun lake (biggest artificial lake in Lebanon), this latter gave its name to a type of flint tool industry (Gigantolithic) from the stone age called the “Qaraoun culture”. Moreover, the trail passes through part of the “Sacred Hermon Mountain and its associated cultural monuments and sites” UNESCO tentative list (ref. 6432). The importance this natural landscape facilitated the creation of a geo-park involving the Bkassine-Jezzine forest and the Shouf reserve. Historically, this sector hosts three important landmarks, the Shehabi citadel of Hasbaya where the Shehabi Emirs resided and controlled Wadi el Taym region for about a millennium. The importance of the Citadel lays in its architectural which traces the architectural history throughout a millennium (11th-19<sup>th</sup> century), the visible parts are mainly Mameluke and Ottoman; the Fakher-ed-Dine cave in Jezzine which was the last refuge of the Emir before his capture by the Ottomans; and the independence citadel of Rachaya where Lebanese leaders (president, prime minister and other politicians) were imprisoned leading to general strikes and uprisal against the French mandate and consequently the independence. No major archaeological excavations/studies have taken place in this region since 1975. Different archeological ruins can be found in the villages (sarcophagi, funerary caves and tombs, wine or olive presses, ...) most of them are not studied or documented (except for the roman temples in the West Bekaa). (Table 26 & Table 27)

Much like the previous cultural landscapes, its cultural landscape revolves around agriculture, mainly olives, grapes and wheat. Ibl es-Saqi was subject to a cultural landscape analysis<sup>30</sup>.

**Table 26 TCH elements in South Lebanon & Beqaa LMT Cluster**

TCH Main Category	Classification	Elements	Area/Village(s)
Archaeological sites	Roman	Roman ruins and quarry	Majdal Balhis
		Ain Ata (ruins), Ain el Herche temple part of the “Sacred Hermon Mountain and its associated cultural monuments and sites” UNESCO tentative list	Ain Aata and Ain el Herche
	Medieval & Ottoman	Shehab Citadel (Medieval and Ottoman)	Hasbaya
		Fakher El Dine grotto	Jezzine
		Independence Castle	Rachaya
		Kanaan Palace	Jezzine
		Khan (Caravanserai)	Hasbaya
		Fortifications	Jezzine
		Bridge and water mill	Jezzine, Bakassine and Rachaya (abou Dje)
Water tunnels and canals	Bkassine		
Religious landscape	Christian	Several old churches	Jezzine, Bkassine, Aintanit, Rachaya and Marjaayoun
		Evangelical church	Marjaayoun
		The Greek Orthodox Bishopric	Marjaoun
		Spring of the Christ	Kawkaba
	Druzes	El-Sheikh el Fadel Sanctuary	- Kawkaba/Abou Arab
		Druze Hermitages and the Prophet Shiit Sanctuary	Khalwet el Biyada
	Muslim	Old Mosques	Hasbaya
Architecture		Hundreds of traditional houses and mansions	All villages
		South Lebanon vernacular architecture	Ibl es-Saqi
Ethnographic and museums		Old Souks	Jezzine, Bkassine, Hasbaya, Marjaayoun
		Poet Emilie Nasrallah House and Museum	Ain Ata
		The Norwegian ethnographic museum	Ibl el saki

<sup>30</sup> Makhzoumi, Jala et alii. (2012). Landscape Approach to Bio-Cultural Diversity Conservation in Rural Lebanon. 10.5772/33343 ; Makhzoumi J. (2009) Unfolding Landscape in a Lebanese Village: Rural Heritage in a Globalising World, International Journal of Heritage Studies, 15:4, 317-337, DOI: [10.1080/13527250902933793](https://doi.org/10.1080/13527250902933793) ; and Makhzoumi, J. (2004). The contested landscape of Ebel-es-Saqi: traditional rural landscapes in a post traditional World, *Proceedings of Conference for of the International Association for the Study of Traditional Environments*, Sharja, UAE, December 14-16.

	Agricultural landscape, terraces, and practices (e.g. Fruits trees, grapes, beekeeping)	All villages
--	---	--------------

**Table 27 ICH elements in South Lebanon & Beqaa LMT Cluster**

ICH Category	Elements	Area and Village(s)
Oral traditions and expressions	N/A	N/A
Performing arts	Traditional Lebanese “Dabkeh” dance	All villages
	Zajal chanted poetry (UNESCO ICH)	All villages
	‘Ataba traditional chant	All villages
Social practices, rituals and festive events	Thursday’s market (a flea market) - Hasbaya	Hasbaya
	Religious feasts and social traditions in all villages	All villages
	Druze cultural heritage (e.g. Matteh Drinking, Traditional Clothes) - Hasbaya	Druze villages
	Jezzine festival	Jezzine
	Bkassine Festival	Bkassine
	Kfar Meshki Molasses festival	Kfar Meshki
Culinary heritage and local products	<ul style="list-style-type: none"> <li>• Man’oushe (UNESCO ICH)</li> <li>• Dairy products (especially Keshek and Jebne Baladiye)</li> <li>• Grape molasses</li> <li>• Bread making</li> <li>• Arak distillation</li> <li>• Hrisse dish</li> <li>• Saj bread making</li> <li>• Bulgur and lentils-based dishes</li> <li>• Olive picking and oil extraction and their traditions</li> <li>• Rose water</li> </ul>	All villages
Knowledge and practices (nature and the universe)	Bawahir (traditional way to forecast weather)	All villages
	Pine tree culture and harvest	Bkassine
	al Qaida el Qamariye (moon phase rule)	All villages
	Proverbs about weather, seasons, months, nature and sky	All villages
	Edible wild plant harvest	All villages
	al Qaida el Qamariye (moon phase rule)	All villages
	Agricultural practices (ploughing, irrigation, harvest, trimming...)	All villages
Traditional craftsmanship	Soap Factory (Melhem Sabek)	Hasbaya
	cutlery craft making	Jezzine
	Stoves making	Rachaya
	Embroideries	Hasbaya and Rachaya
	Olive oil soap	Several villages
	Traditional pottery	Rachaya
	Silver crafts	Rachaya

### III.2.6 Cultural Heritage Cross Regional Analysis

Lebanon’s heritage encompasses a diverse array of traditions and practices across its distinct regions. This report aims to showcase the cultural heritage of five regions crossed by the LMT, each one offering unique insights into its heritage. By exploring these regions collectively, we seek to uncover both the shared cultural threads and the distinct regional nuances that enrich its cultural mosaic.

Lebanon’s TCH distribution shows a sort of homogeneity, archaeological sites can be found in all 5 regions and covers all periods (from prehistory up to the Ottoman period). Nevertheless, each region has its own peculiarities. Menjez stands as a unique example for its Dolmen and its black stone architecture, while Qadisha represent another distinctive significance for being one of the most important early Christian monastic settlements in the world making it of an outstanding universal value. Both Jbeil-Nahr Ibrahim and West Bekaa-Mount Hermon share in common a density of Roman temples. Two other regions share same features, the majority of Hardian forest inscriptions is to be found in North Mount Lebanon and Northern Mount Lebanon; those two regions share also the same religious landscape with a big concentration of churches, monasteries and convents. The Jezzine-West Bekka.

As for the ICH, several elements are common to all regions such as performing arts, Knowledge and practices (nature and the universe). Also, agricultural practices, religious feasts and social traditions and most of the culinary traditions especially: Man'oushe (UNESCO ICH), Dairy products (mainly Anbarize/Serdale cheese and Keshek especially the green keshek), Arak distillery, Hrisse dish, Saj bread making, Bulgur and lentils-based dishes, traditional food preservation processus (Moune) are common to all regions. Nevertheless, some regions have their own particularities such as the Druze related traditions which can be found in South Mount Lebanon and in West Bekaa. Moreover, some culinary traditions can be found either on region scale or even on a village scale such as the Ambrize cheese. From a more technical perspective the following table shows the challenges, opportunities, improvements and advantages of the 5 regions. (Table 28)

**Table 28 Cultural Heritage Cross Regional Analysis**

Cluster	Challenges & Needs	Opportunities & Potential	Improvements	Strength & Competitive Advantages
<b>Akkar &amp; Donnieh</b>	-Community involvement and ownership -Funding resources Law enforcement	-Preservation and valorization -Tourism and economic development	Full surveying & documentation	-Authentic and uniqueness -Rurality
<b>North Lebanon</b>	-Continuous Management of Qadisha and the Cedars -ICT Safeguarding -Physical conservation and restoration	-Community Revitalization -Place Branding and Identity	-Full surveying, documentation -Continuous preservation plans	-Sense of place -Legacy and continuity -Identity preservation
<b>North Mount Lebanon</b>	-ICT Safeguarding -Physical conservation and restoration -Landscape protection	-Place Branding and Identity -Community engagement and participation	Full surveying & documentation	-Sense of place -Storytelling power
<b>South Mount Lebanon</b>	ICT Safeguarding Physical conservation and restoration	-Place Branding and Identity -Community Engagement and Participation	Full surveying & documentation	-Sense of place -Storytelling power -Sustainability -Protected landscape
<b>Beqaa &amp; South Lebanon</b>	-Community Involvement and Ownership -Funding and Resources -Full surveying and documentation	-Preservation and valorization -Tourism and economic development -Community Engagement and Participation	Full surveying & documentation	-Diversity and Authentic -Rurality

### *III.2.7 Cultural Heritage Strategic Recommendations*

To effectively support the development and preservation of cultural heritage along the LMT, a comprehensive strategy encompassing several key initiatives is proposed:

#### **A. Institutional and Regulatory Support**

**A.1 Support the development of regulatory/institutional framework for ICH:** establishing clear and concise regulatory and institutional framework for Cultural Heritage especially ICH is imperative. This framework should include guidelines for identification, documentation, and safeguarding of ICH practices along the trail, ensuring their protection and promotion

## B. Conservation and Management

**B.1 Assess the State of Cultural Heritage elements, and Support their Protection and/or Valorization:** conducting a systematic mapping and classification of endangered sites, monuments, and various types of CH along the LMT is essential. This initiative will provide a clear understanding of the cultural landscape, identifying areas in need of urgent preservation effort.

**B.2 Foster partnerships with governmental agencies, NGOs, academic institutions, and private organizations to leverage resources and expertise for heritage preservation projects:** Partnerships with such institutions and resources leverage will pool resources and expertise for heritage preservation projects. Collaborative efforts will strengthen conservation initiatives and promote sustainable tourism development.

**B.3 Raise awareness and advocacy among local communities and authorities especially about ICH:** raising awareness and advocacy among local communities and authorities about ICH significance is crucial. Engaging stakeholders through workshops, seminars, and community dialogues will foster appreciation and support for heritage conservation efforts.

## C. Human Capital Development

**C.1 Develop & deliver heritage education programs for schools and youth:** By developing and delivering heritage education programs tailored for schools and youth will instill a sense of pride and responsibility towards cultural heritage. These programs will include interactive activities, field trips, and curriculum integration to promote a deeper understanding of local traditions and histories

**C.2 Create a dynamic page on the LMT website to search for and learn about Tangible and Intangible heritage along the trail and in trail villages.:** creating a dynamic online platform on the LMT website dedicated to searching and learning about Traditional Cultural Heritage (TCH) and Intangible Cultural Traditions (ICT) will enhance accessibility and knowledge dissemination, it will also improve the process of safeguarding heritage elements.

**C.3 Create accessible archives, databases, and repositories for heritage materials:** creating accessible archives, databases, and repositories for heritage materials will facilitate research, education, and public access. These resources will serve as repositories of knowledge, aiding in the documentation and dissemination of cultural practices

## D. Heritage Development

**D.1: Develop thematic cultural heritage trails that highlight aspects or periods** creating thematic cultural heritage trails such as Roman temples trail, Mameluke roads, Kebbe trail, edible wild plants trail, crafts trail... will highlight distinct aspects and historical periods along the LMT. These trails will offer immersive experiences for visitors, showcasing unique cultural practices and landscapes

**D.2: Create a platform for cultural practitioners on the LMT to share their skills and performances with wider audiences, both locally and internationally:** creating a dynamic online platform on the LMT website dedicated to searching and learning about Traditional Cultural Heritage (TCH) and Intangible Cultural Traditions (ICT) will enhance accessibility and knowledge dissemination.

## E. Heritage Promotion

**E.1 Organize cultural festivals, performances, and exhibitions to showcase and celebrate intangible heritage practices:** organizing cultural festivals, performances, and exhibitions along the LMT will serve as platforms to showcase and celebrate intangible heritage practices. These events will promote cultural exchange, tourism, and community engagement

**E.2 Identify and support Heritage Champions and Heritage Ambassadors along the trail:** identifying and supporting Heritage Champions and Heritage Ambassadors along the trail will recognize individuals dedicated to heritage preservation and advocacy, ensuring promoting excellence and leadership in cultural conservation efforts.

**E.3 Promote the LMT and its heritage:** Promoting the LMT as a heritage destination is crucial as it plays a major role in the perseverance of its cultural heritage. This initiative not only encourages tourism and boosts local by creating opportunities for sustainable development and enrich the visitor experiences with immersive cultural insights, ensuring that both tangible and intangible heritage continue to be valued and preserved for future generations.

### III.3 Environmental Conservation and Climate Change

A holistic and integrated view of environmental conservation across the LMT has never been achieved. Yet, information is available even if scattered into different sources and databases. The existing data and assessments are conducted at national or local scales and not necessarily along the LMT main or side trails. Without a thorough field survey along the trail and side trails, we assessed the environmental status through remote sensing and Geographic Information System (GIS) techniques. Based on the available data, we categorized this section using the following components or themes: i) Land cover and land use, ii) land designation status, iii) biodiversity hotspots, iv) water resources, v) climate change, and vi) thematic risk assessments. Part of the maps illustrating this work are incorporated within the text, while **Annexes 1 to 7** complete the set.

#### III.3.1 Land cover-land use change

The National Center for Remote Sensing (NCRS) under the National Scientific Research Council (NSRC) is mandated to develop such maps. Land cover and land use (LCLU) are derived from satellite imagery analysis and ground truthing. Maps are updated regularly, and the latest version is dated to 2017. The center follows the CORINE classification system and provides a simple overview of the land cover and land use types. The maps allow us to delineate, and define the area, the type, and the location of forests and scrublands, croplands, grasslands, urban areas, etc. Sub-categories for those major classes are not detailed; for forests, we can distinguish deciduous and evergreen broadleaves, conifer major types, and dense or open forests. For cropland, categories along the LMT include olive, vineyards, fruit tree orchards, open field crops, and fallow lands. A similar categorization is done for the other land cover classes (**Figure 12 Land Cover Land Use map**).

The GIS enables overlaying the LMT on such maps and determining the type of cover across the trails, their extent, their degree of aggregation or fragmentation, and changes over time. When the LMT is overlaid on the land cover land use map (produced by the CNRS in 2017), the share of the main land use types is shown in **Table 29: Share of the main land cover types and their distribution by LMT sections**.

This exercise is crucial to prioritize areas for restoration or conservation to preserve the landscape and for monitoring. Comparing changes in land cover and land use across time is useful for analyzing environmental aspects such as their potential to sequester carbon and mitigate (or not) climate change. Trend analysis is also useful to assess erosion and land degradation, and to define strategic land use planning at national and local levels. Although the LCLU maps do not provide a qualitative assessment of the landscape, they are essential to study the impact of threats and human activities (Box 2).

#### Box 2: Change of LCLU in high mountains

- The UNDP LDN project is conducting a trend analysis for LCLU between 1998, 2005, and 2017 maps. The studied area is above 1,500 m a.s.l. encompassing important LMT sections. Main findings (not published yet; source of forest maps: ORG):
- Increase in forest cover (mainly between 1998 and 2005).
- Reduction in areas of scrubland and grassland.
- Grasslands are partly deteriorated into barren areas or sparsely vegetated areas or artificial man-made uses.
- Scrublands partly evolved into forests, and others were changed into urban or agricultural areas
- Water bodies (dams, hill lakes, wetlands) increased.
- Quarries and sand pits increased to the detriment of forests, grasslands, and scrubland (mainly after 2005).
- Overall agriculture areas increased; mainly fruit trees in the mountains.



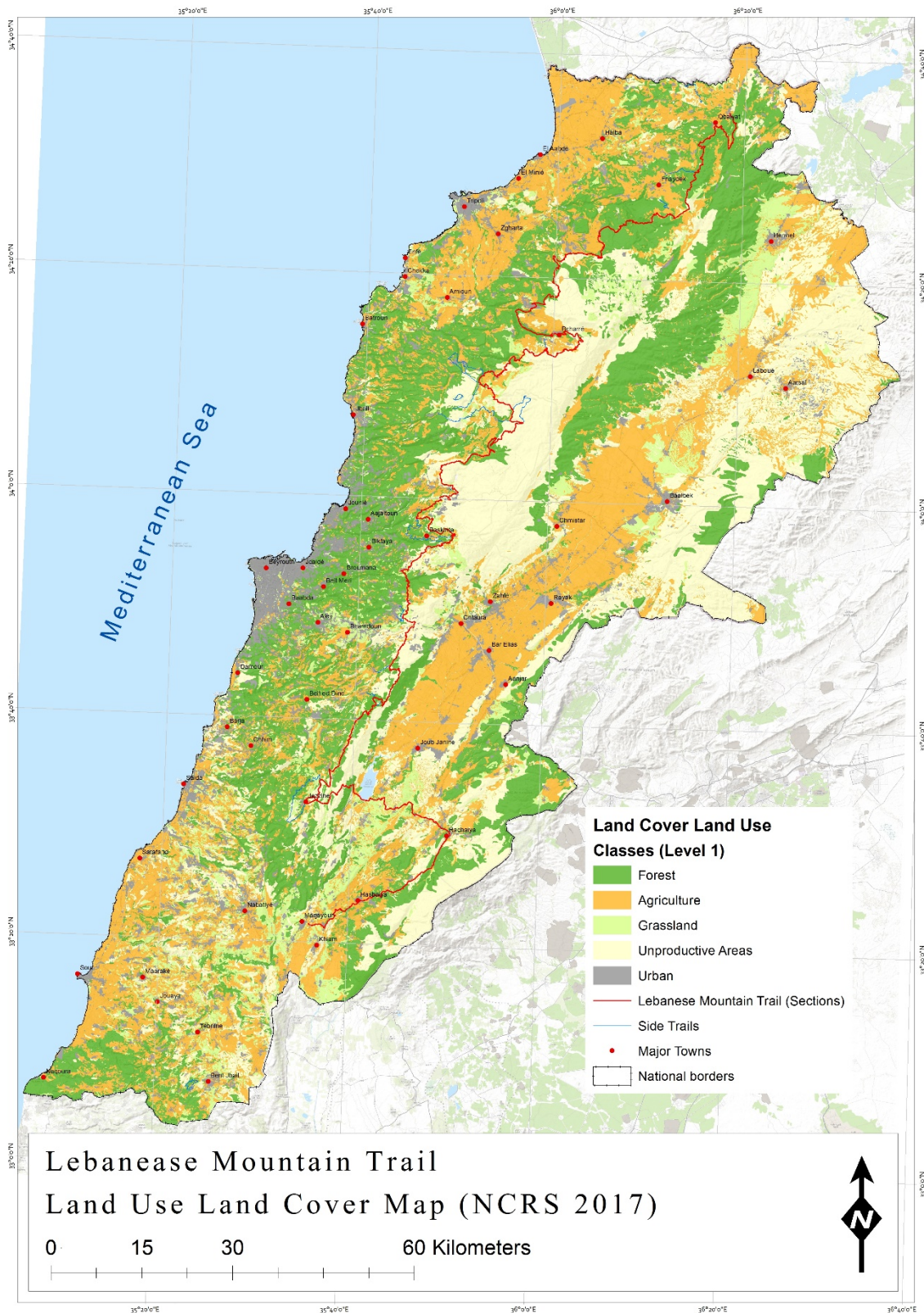


Figure 12 Land Cover Land Use map

**Table 29: Share of the main land cover types and their distribution by LMT sections**

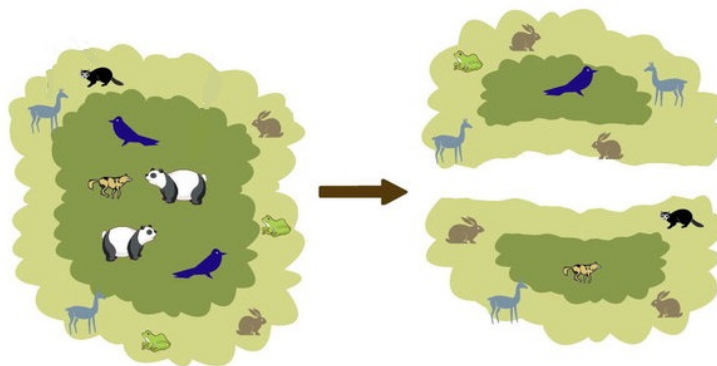
LCLU	LENGTH (M)	% OF LMT LENGTH	SECTIONS
RIVERS	232	0.1%	9, 12, 26
WATER BODIES	2265	0.5%	8, 15, 16, 23
SPARSELY VEGETATED AREAS	122618	29.7%	All except 1A, 1, 3, and 7
GRASSLAND	33806	8.2%	All except 1, 3, 7, 8, 11
FORESTS, WOODLANDS, SCRUBS	163902	39.7%	All except 23
AGRICULTURE LAND	72615	17.6%	All except 6, 18, 19
ARTIFICIAL AREAS	17675	4.3%	All except 2, 3, 18, 13, 14

The change of land cover and land use at the trail scale include several aspects including:

- Non-cleared path due to increased vegetation density, tree felling, landslide, flood, erosion, forest fire, marking vandalism, and other factors raging the trails. So far, some of these aspects have been mapped by the LMTA but need continuous yearly updates. Those tiny breaks cannot all be depicted by satellite imagery. Still, when they exist on a large scale, they can be spotted (forest fire, landslide, erosion risks, and the intersection of trails with streams where flash floods or intense runoff can cause damage are respectively illustrated in **Annexes 1 to 4**).
- Quarrying, construction, public works, reforestation, and land reclamation for agriculture, can eliminate the trail, and alter the landscape. The LMTA mapping doesn't capture these changes but can be depicted every 5 years from the LCLU maps. The use of GIS tools allows us to illustrate and quantify these changes. Some aspects are difficult to sense in the short term, such as the abandonment of agricultural land, or forest expansion, and require decades to be noticeable.
- Land mines, military zones, and other security-related aspects are related to changes in land use and mapped by the LMTA along the trail. Their updates are irregular and based on evidence during trailblazing or data availability at the Directorate of Geographical Affairs in the Lebanese Army.
- Landscape quality is related to the diversity of land cover types. A mosaic landscape is preferential for biodiversity conservation, and ecosystem health, and is considered a better esthetic value. The degree of diversity is not defined, but it has two thresholds: the lower threshold is called fragmentation, and the upper threshold is monotony or monospecific landscape. From a biodiversity perspective, small fragments or patches host less biodiversity, the ecosystems are less functional and hard to be self-sustained (Figure 2)<sup>31</sup>. In other words, any threat can wipe them out, and their recovery from the threat is compromised. The monotony of the landscape is due to large patches with the same species dominating the land cover. Monoculture in cropland and monospecific forest formations are good examples of where biodiversity is poor. The degree of fragmentation and the composition or monotony of the land cover (i.e. monospecific forests, mixed forests, vineyards, olive) can be estimated from the LCLU maps, using GIS tools. (**Figure 13**)

Under this perspective, several initiatives are emerging to sustain a mosaic landscape. The leaders are the Al-Shouf Cedar Society (ACS), which is managing the development zone of the Shouf Biosphere Reserve. The ACS benefited from a continuum of projects allowing building blocks related to the development of ecological corridors, restoration of agricultural terraces, promoting sustainable agricultural practices, and sustainably managing forest resources for fuelwood (i.e. The Forest Landscape Mechanism, BIOCONNECT, RESILAND, etc.). This approach is being recently transferred to Jabal Moussa Biosphere Reserve under the RESILAND project. Other organisms are promoting agroforestry, mainly in West Beqaa and Rachaya.

<sup>31</sup> Chase, J.M., Blowes, S.A., Knight, T.M. *et al.* Ecosystem decay exacerbates biodiversity loss with habitat loss. *Nature* 584, 238–243 (2020). <https://doi.org/10.1038/s41586-020-2531-2>



**Figure 13: Habitat fragmentation**

(Source: <https://biology4alevel.blogspot.com>)

On the other hand, the Green Plan is the sole public agency supporting land reclamation for agriculture, the opening of agricultural roads, hill lakes, and water-efficient infrastructure, through financial support from different donors, under different projects.

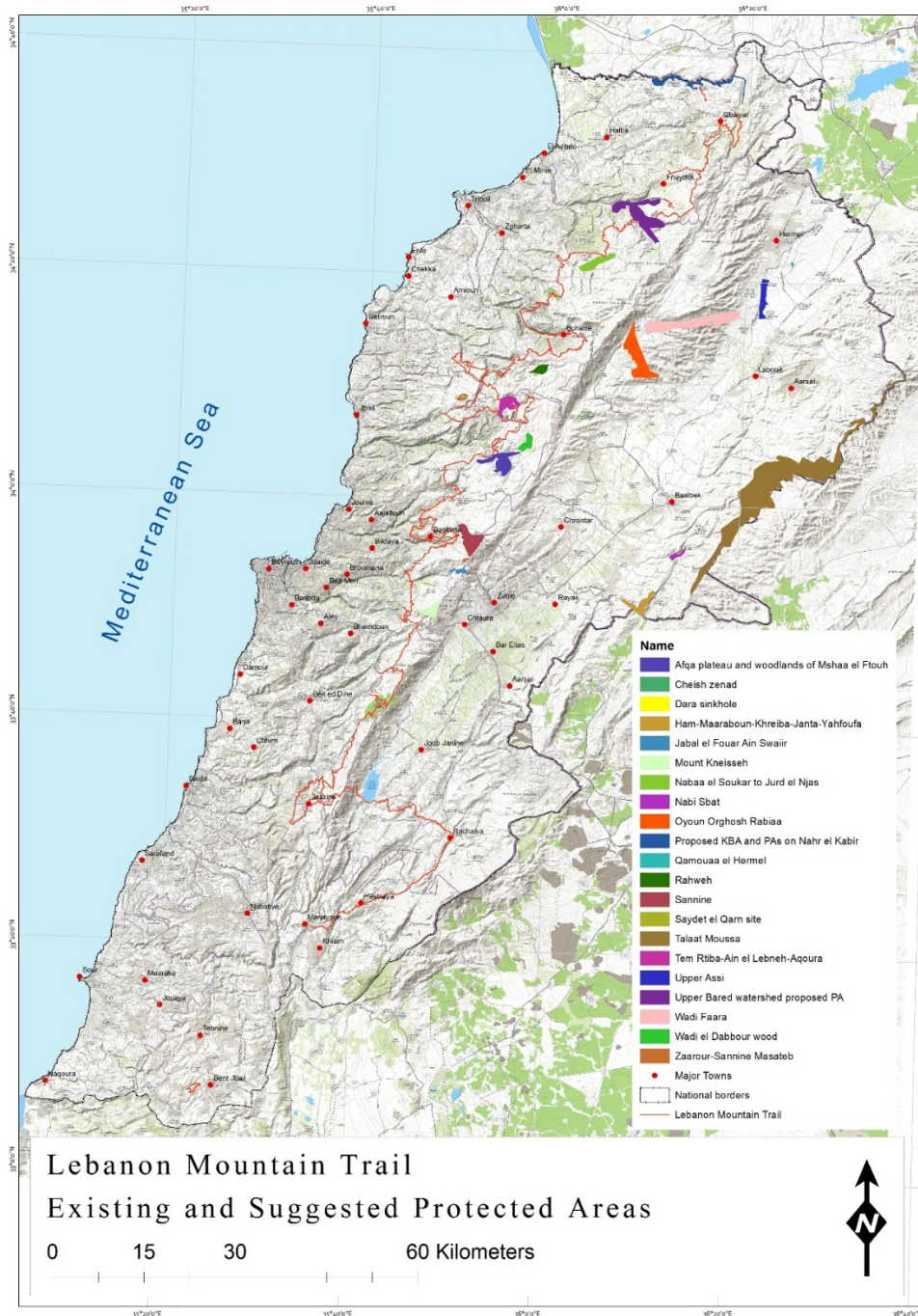
### III.3.2 Land designation status

Land designation describes whether there is any conservation action through certain legal measures such as protected areas, sustainable development, or management plans, or if the area is managed for production. Land ownership highly affects the designation status. Changing the land cover and land use in public lands is very limited due to legal constraints, while the type of protection is also affected by land ownership. For instance, only public and communal lands can be declared nature reserves. In contrast, communal and private lands may benefit from other types of protection status like hima or Other Effective Conservation Measures (OECMs). Some designations for conservation are international, and without necessarily a legal status in Lebanon, and are classified apart. Urban planning and zoning are declared at the municipal or federation levels, but these only exist in areas where the cadastral delineation has been achieved. Hence, in Akkar, Donnieh and part of the south, cadastral maps are absent, and consequently, there is a long way before any zoning or planning can be achieved. In 2023, the UNDP Step4nature project produced for the first time the first official delineation of the protected areas of Lebanon, all categories combined (**Figure 14: Existing and suggested protected areas**).

**Table 30** illustrates the protected areas along the LMT and side trails and those close to them. Except for protected forests, declared by the Ministry of Agriculture (MoA), all the other national designations are under the Ministry of Environment (MoE). In addition, many benefit from multiple designations, at least in a certain part of their area (case of Jabal Moussa, Qadisha Valley, or Shouf Biosphere), other sites are not yet declared (in the pipeline like Mrebbine juniper forests).

**Table 30: Protected areas along the LMT by category of protection**

Protection category	Protected area name
Nature Reserve	Karm Chbat, Ehdén, Tannourine, Jaj, Arz el Chouf, Rachaya (near LMT)
Nature Site	Qadisha Valley, Nahr el Jaouz, Nahr Ibrahim, Nahr el Kalb, Nahr Beyrouth, Nahr el Damour, Nahr el Awali, Jabal el Makmel, Qamouaa, Qaraqir valley, Baatara sinkhole, Jisr el Hajar, Ehmej, Jabal Moussa.
Hima	Andqet, Menjez, Jurd el Aqoura, Tarchich, Hammana, Aitanit, Ibl el Saqi, Qaraaoun. Others are in the pipeline.
Protected forest	Ain Hoqaïlat/Karm el Mohr, Jord el Njas/Jabal el Arbaain, Mrebbine (in the pipeline for Nature reserve), Arz Bcharri, Hadath el Jebbeh, Jabal Moussa, Mtein, and Bekassine.
International designation	Qadisha Valley World Heritage Site, Jabal Moussa Biosphere Reserve, Shouf Biosphere Reserve



**Figure 14: Existing and suggested protected areas**

(Source: UNDP, Step4nature project)

Not all designation statuses are the same; some have active management plans targeting at least the conservation of certain plants, wildlife, or the landscape while others are practically protected only on paper, which is the case for most nature sites. Areas without designation status are generally used for production or other human activities either formally on most private lands or informally on most public or communal lands.

Strategic land use planning defines the future uses of the land keeping as much as possible a certain equilibrium between the population needs, and the capacity of the natural resources to fulfill those needs, without compromising their sustainability. At the National level, there is the National Physical Master Plan for the Lebanese Territory (NPMPLT) that was signed by the government in 2009, while most of the study was conducted before 2005<sup>32</sup>. The NPMPLT which was not followed up with an action plan, nor updated, remains the backbone of any further strategic planning. One major takeaway was the suggestion of a “cedar and fruit trees corridor” that spans the western slopes of Mount Lebanon between 1500m and 1900m, and therefore almost entirely fitting with the LMT and its side trails. The map illustrates 10 areas with exceptional landscape features that are potentially arranged into parks and protected areas. The LMT crosses 9 of these areas (except the one around Yammouneh to Oyouh Orghosh). The NPMPLT foresees forests and zones for ecological continuity, high mountain plateaus, areas with high agriculture value to be conserved, and so forth (**Figure 15**).

---

<sup>32</sup> DAR – IAURIF, 2005. National Physical Master Plan for the Lebanese Territory. CDR.

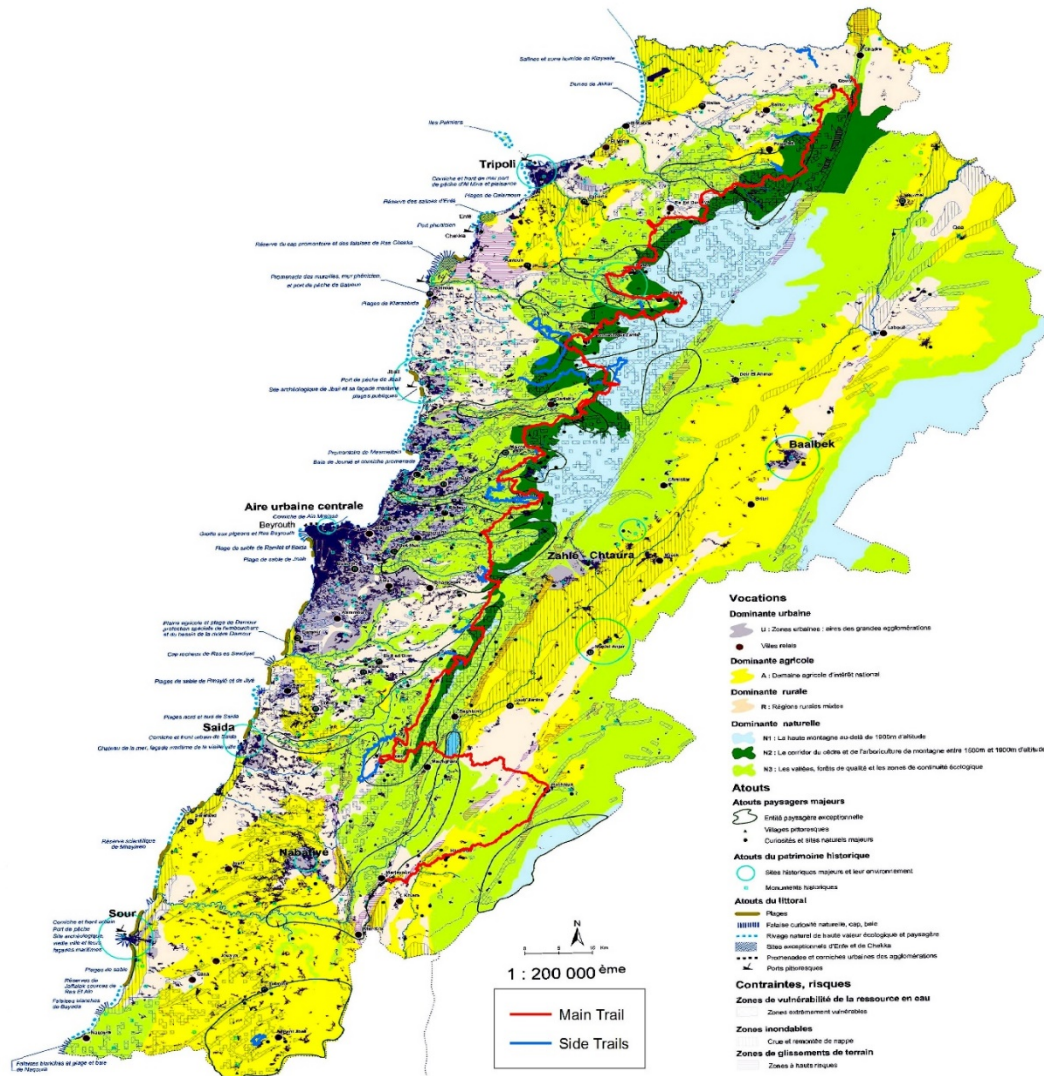


Figure 15: The soil vocations of Lebanon

(Source: NPMP/LT)

In the following years, regional land use planning was developed by the Council for the Development and Reconstruction (CDR) with different partners, and local stakeholders were produced for Jezzine area, Upper Matn, Donnieh, and Aakkar. Nonetheless, these initiatives remained orphaned, and not followed by a legally binding document or resolutions and regulations facilitating their execution at the local level. A major example is the creation of a regional park in upper Akkar-Hermel-Donnieh (Figure 16), and another one is to preserve the identity of the upper Maten by preserving the stone pine forest.

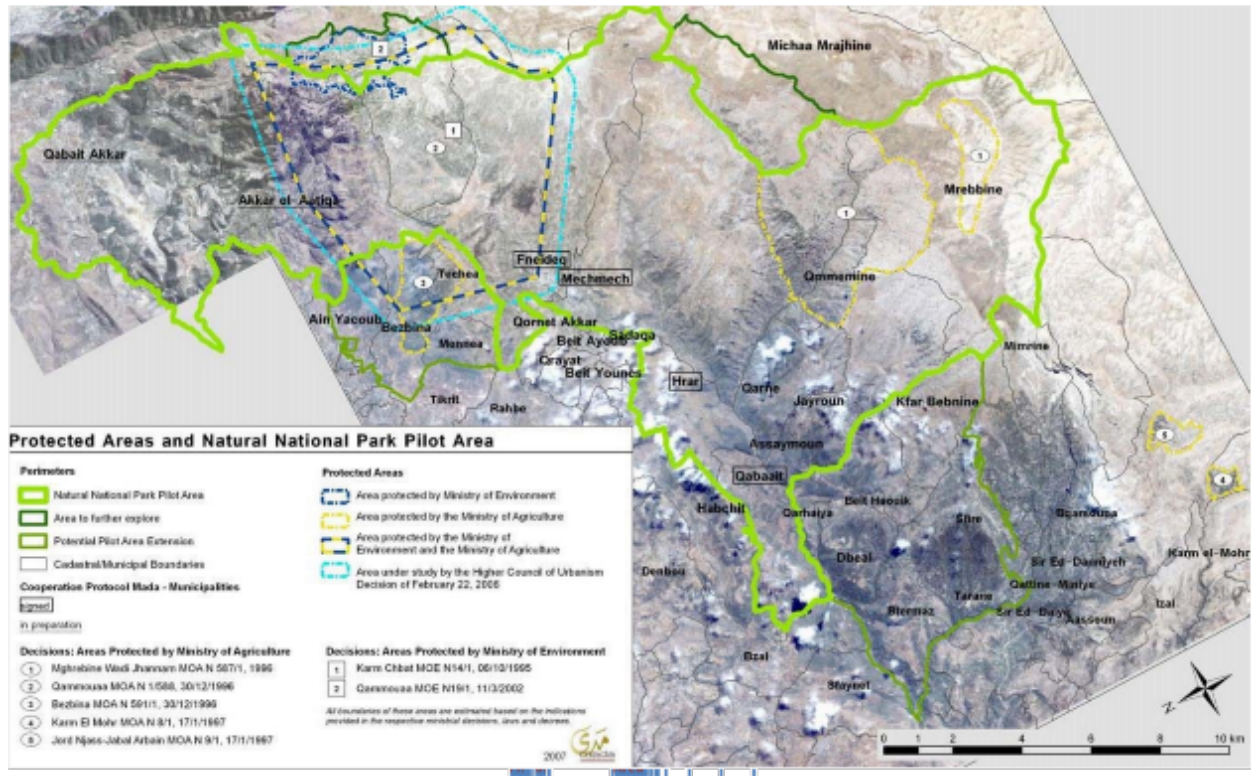


Figure 16: A compiled map of protected areas and the foreseen national park in upper Akkar

(Source: MADA)

The UNDP Land Degradation Neutrality Project is preparing with implementing partners a strategic land use planning for the high mountains is in process. The project scope is mountains above 1500m, with local development action plans for Akkar and Jbeil for areas starting at 800m elevation. In parallel, the Conservation of Environmental Sensitive National Areas in Lebanon (CESNA-LB) project prepared a draft law for the mountain’s protection.

As part of the new international designations, the concept of Geopark has been introduced through several projects like the BIOCONNECT and the LDN, to preserve part of the exceptional landscape that is related to geological (and hydrological) features, with their associated flora and fauna. Three potential areas are currently examined: i) the upper Wadi Jhannam valley toward Qamouaa, ii) the karst landscape from Jabal Jaj towards upper Nahr Ibrahim valley, and iii) the area around Jezzine and Niha el Chouf.

### III.3.3 Biodiversity hotspots

The LMT crosses areas rich in biodiversity within Lebanon; the trail spans high elevations where the diversity of ecosystems and habitats increases the diversity of flora and fauna. At these elevations, population density is relatively low, which favors the presence of wildlife and natural ecosystems, while the rate of endemic plants and other lifeforms is relatively higher. Nonetheless, a biodiversity assessment along the trail was never conducted. Only two side trails in Menjez and Jezzine were partially assessed for the flora during the last 2 years under MenJezzine project implemented by the Association Internationale des Forêts Méditerranéennes (AIFM) and the Lebanese Reforestation

Initiative (LRI)<sup>33</sup>. For instance, for Menjez, 137 plants were recorded along the 4.4km trail during the survey season (in spring).

Seven species are endemic to Lebanon and the neighboring countries. In Jezzine, we recorded 125 species of which 5 are endemic to Lebanon and the neighboring countries, along the 5.4km trail, but the survey started later in April.

Several efforts under the UNDP Step4nature and the EU-funded BIOCONNECT projects have been made to assess the biodiversity in most nature reserves and other protected areas starting in 2023. Ehden, Tannourine, Jaj, Shouf Biosphere, and Mount Hermon will soon have a formal checklist of flora, fauna, and even fungi for some of them. A similar assessment was achieved in the hima of Hammana and Ibl el Saqi. Other incomplete assessments are being informally done under different umbrellas in Qamouaa, Jabal Moussa, Qaraqeer Valley, and other areas along the LMT, or close to it. El Zein and allies compiled and analyzed data under different projects in West Beqaa and Mount Hermon (OLIFE and UNDP) and produced a checklist of species and EUNIS habitats for the Mount Hermon region<sup>34</sup>.

A few key biodiversity areas (KBA) integrate important plant and bird areas (IPA and IBA respectively) and are located along the LMT and its annex trails<sup>35</sup>. Outside KBAs covering the protected areas mentioned above, we list Nahr el Kabir, Makmel Mountain, Mneitra Mountain, Sannine, and Kneisseh Mountains. In 2018, BouDagher and allies<sup>36</sup> mapped the IPAs of Lebanon. Using a grid system, they relied on literature and field data to define cells rich in endemic species (**Figure 17**). In 2023, Mitri and allies mapped suggested areas for conservation covering KBAs, and IPAs outside protected areas, while linking them together to improve their connectivity<sup>37</sup>.

As part of the BIOCONNECT project, the NCRS is currently defining areas suitable for ecological connectivity among the different protected areas in the southern part of Lebanon, and to identify further areas for conservation. Even though most of the results have not been published yet, crossing the LMT means encountering more than 60% of the Lebanese flora, and an even higher percentage of mammals, amphibians, and reptiles. The biodiversity assessment within the protected areas is simply the first step to setting a baseline for monitoring, but most importantly, to define conservation objectives and active management plans to sustain life and ecological processes. Unfortunately, due to limited human, technical, and financial resources, the designed management plans are not always at the level of expectations and do not have tailored activities to conserve species of high ecological value. In many cases, the legal framework is either incompatible with the goals or the vision of the local communities and the stewards of the protected areas or hinders some necessary activities targeting specific species and habitats.

---

<sup>33</sup> Stephan J., Salloum G., Naimeh A., Salameh J., Baillet J. 2023. Rapport Biodiversité MenJezzine. AIFM/LRI

<sup>34</sup> El Zein H., Chalak L., Baydoun S., Khater C., Choueiter D., McKenna M., 2024. Habitat characterization and mapping on the western slopes of Mount Hermon in Lebanon. *Vegetation Classification and Survey* 5: 85–107

<sup>35</sup> <https://www.keybiodiversityareas.org/kba-data>

<sup>36</sup> BouDagher-Kharrat M., El Zein H., Rouhan G. 2017. Setting conservation priorities for Lebanese flora—Identification of important plant areas. *Journal of Nature Conservation*.

<sup>37</sup> Mitri, G., Bechara, J., Stephan, J., Naimeh, A., McKenna, M., & Choueiter, D. (2023, September). Geoinformation applications for monitoring protected areas in Lebanon. In *Ninth International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2023)* (Vol. 12786, pp. 557-574). SPIE.

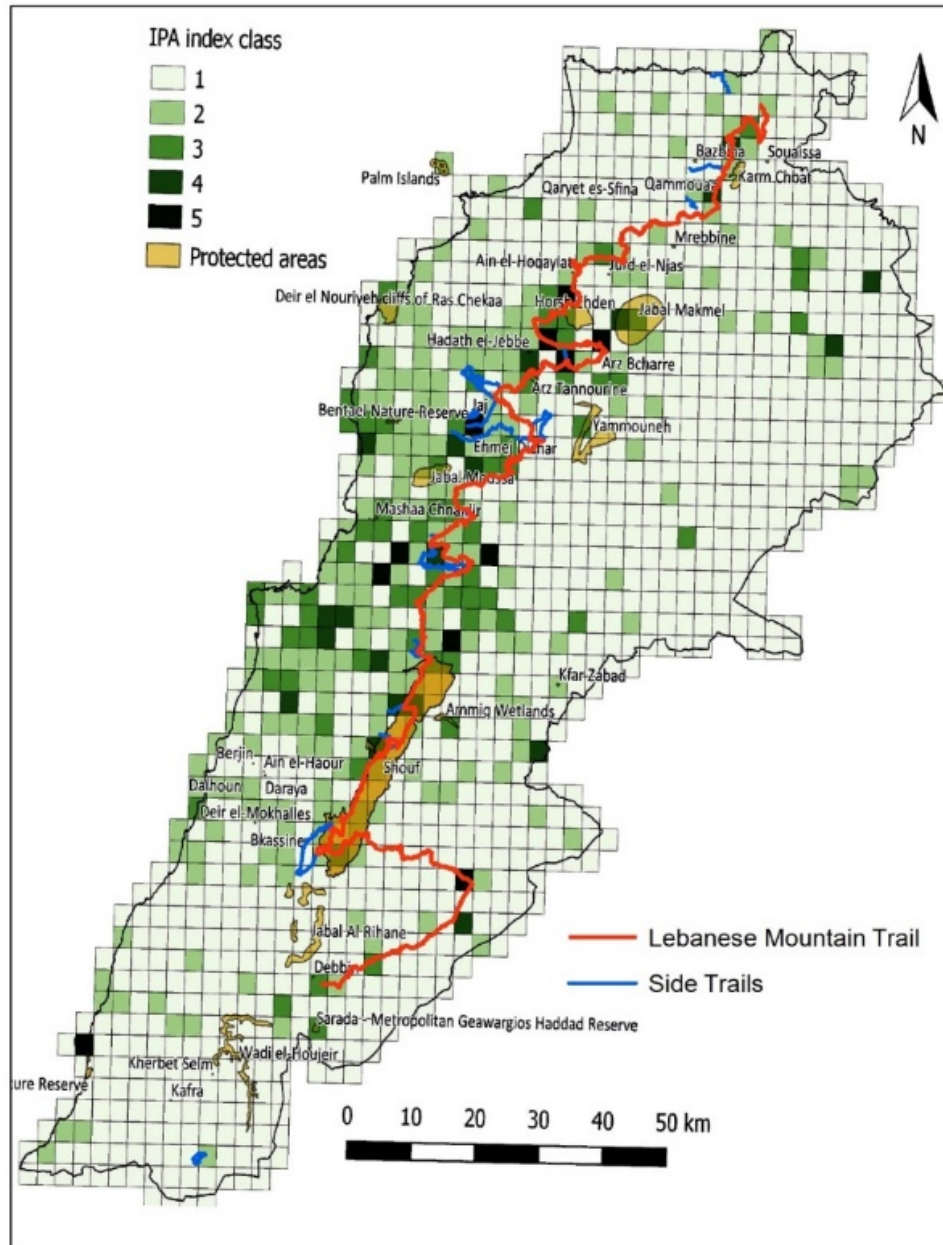


Figure 17: The potential IPAs of Lebanon

(Source: Boudagher et al. 2018)

Nonetheless, several projects across Lebanon target forest and rangeland management, and to follow up with these initiatives, the FAO SALMA project provided a guideline for mainstreaming biodiversity in forest management plans, that were implemented under the project, namely in Aakkar Heights (Qamouaa to Mechmech), Bcharri cedars and plantation sites, Wadi el Dabbour, Roueiss, and Mar Edna in Aqoura, Jurd Keserwan, Hiyata, and Chahtoul forest, Hima Hammana are the sites along or next to the LMT<sup>38</sup>. The project achieved the second forest resources assessment in Lebanon. The results cover all of Lebanon, but many insights could be interesting at the local level. Unfortunately, the results are not published by the FAO or the MoA.

<sup>38</sup> Stephan J., Bassil M., Roukoz S., Asmar F. (2023). Mainstreaming biodiversity in forest management plans. FAO.

Other studies focused on species distribution or recording new species of fauna and flora in Lebanon. Unfortunately, the data is scattered among authors, and a national database is absent. The key efforts conducted include the habitat classification of Lebanon as aligned with the European System<sup>39</sup>, the modeling of native tree and shrub species distribution<sup>40</sup>, the definition of suitable areas for reforestation (the latter is ongoing with the CNRS), and the first compilation of the IUCN red list for threatened plant species in Lebanon<sup>41</sup>. Many threatened species are found in protected areas and along the LMT and its side trails.

### III.3.4 Water Resources

In 2014, the LMTA conducted a water springs assessment along the LMT, mapping them while indicating the drinkable ones<sup>42</sup>. The survey recorded 60 springs, excluding Aakkar which was not assessed. From the recorded springs, 21 are potable, 18 show low health risk due to low contamination, 14 are classified with moderate risk, and 5 should be avoided for drinking. Two were not analyzed. Since then, little attention has been given to this database. Recently, under the RESILAND project, the assessment of water resources in both Jabal Moussa and Shouf Biosphere Reserves has been achieved, but not published yet. Both assessments are part of the effort to develop the new management plans for both reserves. The UNDP underground water resources assessment, and the recent diagnostic report for the strategic land use planning of the high mountains, but the results are not published or publicly available.

Unfortunately, systematic water resources monitoring is absent in Lebanon, and some municipalities or water stewards conduct microbiological, physical, or chemical analyses for their springs, now and then. The Lebanese Agriculture Research Institute (LARI) can do such testing upon request. Yet, financial support is needed to cover the cost of sampling and analysis. It is therefore essential to conduct a systematic analysis at least once a year, preferably before April. At the same time, metering the flow of springs could be important for water management under changing climatic scenarios (the first before April and the second end of September). Such data is also valuable if we want to compare the flow with the climatic conditions (snow cover, annual rainfall) or monitor flow and water quality as affected by the land use (agriculture, quarrying and sand extraction, reforestation, urban development, etc.). Water resources are not only key along the trail, but serve the rural economy, as they are key for agriculture, some local industries, and for tourism.

Overlaying the LMT and side trails on the topographic map of Lebanon, and the map from the previous survey yielded 125 springs along the LMT and 9 along the side trails. The springs' names, coordinates, and distribution along the different trail sections are illustrated in **Annex 5** and in the supplementary material. It is noteworthy to mention that the strategic land use planning of the high mountains is foreseeing the development of a “blue corridor” along the impermeable clay layer that spans a strip of land from Dahr el Baidar to Donniah. The corridor consists of areas where the development of hill lakes can be promoted to foster water harvesting and compensate for the increasing water demand for agriculture and domestic use. Part of the corridor is along the trail. The most imminent part is the section Mtein-Falougha, where the hill lakes are concentrated close to the trail. Another one is Aqoura to Laqlouq. Yet, the creation of additional hill lakes can damage the trails, and therefore such work should be coordinated with the municipalities and the Green Plan when relevant.

<sup>39</sup> El Zein, H., Stephan, J., Khater, C., Al-Zein, S.M. & Bou Dagher-Kharrat, M. (2022). Aligning terrestrial habitat typology of Lebanon with EUNIS habitat classification. *Phytocoenologia* 51 (3).

<sup>40</sup> Stephan J., Bercachy C., Bechara J., Charbel E., López-Tirado J., 2020. Local ecological niche modelling to provide suitability maps for 27 forest tree species in edge conditions. *iForest* 13: 230-237.

<sup>41</sup> El Zein, H. & Kahale, R.: First comprehensive IUCN Red List assessment of the endemic flora of Lebanon. — *Fl. Medit.* 32: 327-338. 2022. — ISSN: 1120-4052 printed, 2240-4538 online.

<sup>42</sup> Hawwa H. 2014. Water quality analysis for LMT freshwater springs.

Another important note is to map the wastewater treatment plants since they are crucial to limiting water pollution and preserving water quality in running water and underground resources. Moreover, their presence may induce a trail deviation to avoid the emanating smells.

### III.3.5 Climate Change

Climate change is the most challenging threat for rural communities and their environment. The fourth national communication to climate change published in 2022 showcased the future scenarios and the resulting impact on the different sectors<sup>43</sup>. Along the LMT, snow cover residence time will decrease from 110 to 45 days by the end of the century. Water availability will be reduced, while water demand will increase due to higher temperatures and frequent heat waves. As a result, agricultural productivity will be compromised. Apple, cherry, olive, and grapes are still among the vulnerable crops, as well as honey production and dairy and meat production from small ruminants, since these are highly dependent on natural pastures. Planting and grazing practices and timing shall be altered as well. This will affect related sectors like agrotourism and agrifood industry. Forest fires, snow throw, and pest outbreaks will be more damaging. According to the same report, the most vulnerable agriculture areas by mid or end of the century are the mountain regions (above 900m) of northern and central Mount Lebanon (Bcharreh, Tannourine, Jurd Jbeil, upper Akkar) and Mount Hermon area (Rachaya), all of these are crossed by the LMT. The report qualifies the agricultural lands of the cazas of Bcharri, Rachaya, and Hasbaya as the most vulnerable, while the compound crises would severely affect other regions (Figure 18).

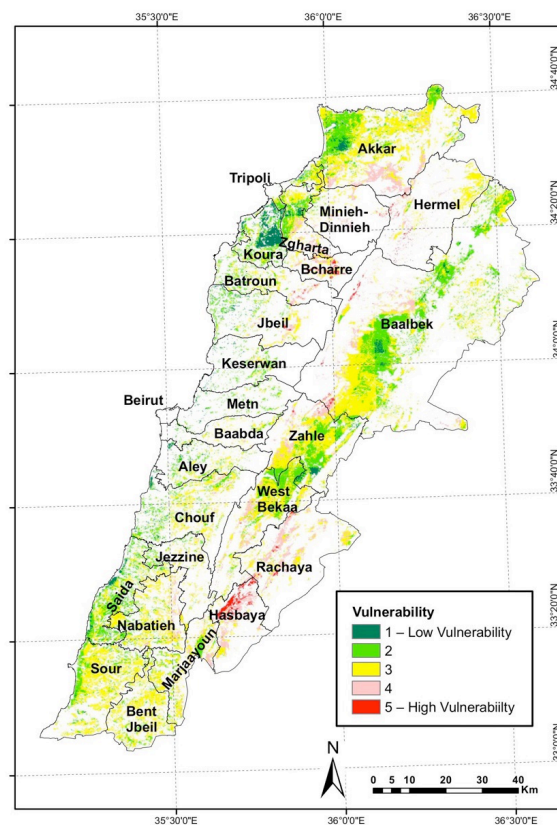


Figure 18: Vulnerability to climate change under the pessimistic scenario, by the end of the century

(MOE/UNDP/GEF, 2022)

<sup>43</sup> MOE/UNDP/GEF (2022). Fourth National Communication to the UNFCCC. Beirut, Lebanon.

Hence, climate change will exacerbate the change in land cover and land use and severely alter the socio-economic aspects that characterize the mountain communities. The capacity of the population to cope with the change is meager due to the multiple crises striking the country. Among the numerous direct impacts that could be mentioned, we list below the main ones (Table 31).

**Table 31: Features of the impact of climate change according to climate events**

Climate event	Impact
Prolonged drought	High fire risk, tree defoliation, pest outbreak, water bodies dried out, limited vegetation and reduced biodiversity, reduced touristic attraction, low agriculture productivity.
Heatwaves	High fire risk, plant withering, low agriculture productivity, change in outdoor tourism activities pattern.
Hail	Low agriculture productivity.
Low snow cover persistence	Water scarcity, limited vegetation and decrease in agriculture productivity, change in grazing patterns, change in winter tourism activities patterns, pest outbreak.
Storms (rain/snow)	Damage to forests, agriculture and trails, landslides, floods.
Cold waves and late frost	Damage to agriculture, reduced biodiversity, alteration of the timing of agriculture, grazing and touristic activities.
Warm winters	Reduced biodiversity, reduced agriculture production, limited winter tourism activities, change in grazing patterns, pest outbreak, low snow cover, and lower groundwater recharge (water scarcity in summer).

However, the key feature of climate change is the uncertainty of the climatic conditions, meaning it is difficult to determine when they will happen, to what extent, and at what intensity. Uncertainty can highly increase climate risk in both the agriculture and tourism sectors. The American University of Beirut National Conservation Center (AUB-NCC) is launching a roundtable series entitled “The New Roadmap to a Green Transition: Exploring Today’s Climate Actors”. THE NCC with UN-Habitat Lebanon, CEWAS Middle East, and Synaps Network, are designing engaging conversations to discuss the role of municipalities, social enterprises, research centers, civil society, and more in leading climate action in Lebanon’s unstable context. In parallel, the Issam Fares Institute (IFI) at AUB analyzed the resilience of agriculture communities to climate change and its impact on their livelihood<sup>44</sup> namely for localities hosting refugees. The study was conducted for the World Food Program (WFP) to define areas with the lowest resilience and prioritize actions. Villages in Akkar, Donnieh West Beqaa, and Rachaya have low to moderate resilience. In 2024, the World Bank produced the Country Climate and Development Report (CCDR) which aligns the country’s short-term recovery needs with resilient, low-carbon, long-term development to study the effects of climate change on Lebanon’s recovery and development objectives<sup>45</sup>. The report summarizes the impacts per sector in Table 32.

**Table 32: Projected losses induced by climate change in key sectors by 2040<sup>46</sup>**

Sector	Projected climate change risks and damages
<i>Water</i>	It is projected that increases in heat and precipitation will decrease water availability annually by 5.7 to 9 percent depending on the scenario. In the dry season, it is projected that water availability will be 42 to 54 percent lower depending on the scenario (pathways of projected emissions and temperature).
<i>Agriculture</i>	It is projected that combined climate change effects will decrease the yield of irrigated crops by 0.3 to 8.7 percent and of rainfed crops by 3.5 to 7.5 percent. Annual financial losses in rainfed and irrigated crops due to increased temperature and rainfall may reach USD 250 million.
<i>Tourism</i>	The number of snow days is expected to decrease gradually, with 5.9 fewer days in 2030 and 37.7 fewer days in 2050. More severe loss is projected under the pessimistic scenario, with 8.6 fewer days in 2030 and 50 fewer days in 2050. This poses a direct threat to winter tourism. It is projected that economic losses due to climate change will be up to USD 500 million per year in total consumption by tourists and a loss in jobs of about 13 percent.
<i>Transport</i>	It is estimated that landslide and flood damage to roads (cost of rehabilitating assets damaged by these hazards) is USD 1.4 billion.

<sup>44</sup> IFI/WFP. 2023. Climate Change, Agriculture, & Livelihoods in Lebanon: Consolidated Livelihoods Exercise for Analyzing Resilience.

<sup>45</sup> World Bank Group. 2024. Lebanon Country Climate and Development Report. CCDR Series. © Washington, DC

<sup>46</sup> Lebanon CCDR/CNRS data

As for the natural environment, several publications related to species distribution under future climatic scenarios were conducted for native trees like the cedar (*Cedrus libani*), oak (*Quercus calliprinos*), fir (*Abies cilicica*), and the Syrian juniper (*Juniperus drupacea*). All studies show a retraction of the areas suitable for the survival of the species and a shifting in elevation.

### III.3.6 Thematic Risks

The threats or environmental issues encountered along the LMT can be divided into the following sub-sections: i) forest fire, ii) forest pest outbreaks, iii) vegetation and snow cover variability, iv) landslides, v) refugee impact, vi) waste discharge, and vii) landmines and security issues.

- i. **Forest fire:** According to the CCDR, Wildfires have increased exponentially, from 343 recorded events in 2019 to 1,077 in 2021.<sup>5</sup> The rising threat of wildfires poses a dual risk, not only endangering valuable assets but also affecting tourism, which serves as a crucial socioeconomic safety net, particularly in rural areas. Increases in fuel prices have forced citizens to find alternative sources for heating, intensifying illegal logging practices and endangering Lebanon's already fragile forests. The NCRS and the University of Balamand produced a joint map for forest fire risk (**Annex 1**). Overlaying the LMT trail to this map, showed that 36% of the LMT crosses areas at risk, the remaining include mainly areas without a risk (urban areas, irrigated agriculture fields, barren land, etc.). Only 1% of the area at risk shows a very high risk and is distributed between sections 1, 2, 5, 9, 19, and 22. The classified areas with high risk cover 8% of the total length of the areas at risk, and are distributed along sections 1A, 1, 2, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 21, 22, 25, and 26. Only section 23 shows zero risk all along its trail as it is devoid of forests, woods, and scrubs.
- ii. **Pest outbreaks:** Pest outbreaks are becoming increasingly impactful due to climate variability, and mismanagement. The prohibition of tree cutting namely in conifers, the expansion of monospecific forests, prolonged drought, and warmer winters all result in increased risks. From an ecological perspective, some pests are a natural occurrence facilitating the change in forest dynamics and fostering an increase in biodiversity. The dwarf mistletoe which causes the death of the Syrian juniper trees in several areas across the trails (Mechmech-Akkar, Jayroun, Wadi Serri, Ehmej, Lassa) is not seen as a threat, since other tree species will replace the affected junipers<sup>47</sup>. Similarly, the cedar web-spinning sawfly and the forest structure are interlinked<sup>48</sup>. However, the desolated landscape with dead-standing trees might be reluctant to nature lovers. Other pests such as the oak and pine processionary caterpillar might cause periodic or seasonal tree defoliation but to date, the tree vitality is rarely compromised.
- iii. **Landslides, flash floods, and erosion.** According to the CCDR (2024), Lebanon's road network is highly vulnerable to climate impacts, with 54 percent exposed to landslides, which damage infrastructure assets, disrupting transport with a direct impact on rural residents and tourists. The NCRS produced a map illustrating areas with risks of landslides (**Annex 3**). Overlaying the map to the LMT and side trails allows us to identify the areas at risk along the trail and prioritize them for actions to mitigate such risk. The highest risk of mass movement is observed on Section 7, followed by Section 4 and Section 9. Among the side trails, Menjez has a high risk as well. The total trail lengths per risk category are mentioned in **Table 33**. Data related to the length of the trail subject to mass movement risk, on each section and side trail, and the risk category are provided in the annexes. Flash floods may occur after and during intense heavy rain. Flow accumulation will build up dramatically leading to high surface runoff which can damage trails.

<sup>47</sup> Douaihy, B., Maamary, A., Yammine, R., Fridlender, A., Nemer, D. & Delerue, F. et al. (2022) Forest canopy and mistletoe infestation alter the facilitative effects of *Juniperus oxycedrus* s.l. on woody seedlings on Mount Lebanon (Lebanon). *Journal of Vegetation Science*, 33, e13163. 3

<sup>48</sup> Bassil S, Kattar S, Navarro-Cerrillo RM, Navarrete Poyatos MA, Nemer N, Palacios Rodríguez G (2018). Stand structure and regeneration of *Cedrus libani* (A. Rich) in Tannourine Cedar Forest Reserve (Lebanon) affected by cedar web-spinning sawfly (*Cephalcia tannourinensis*, Hymenoptera: Pamphiliidae). *iForest* 11: 300-307. - doi: 10.3832/ifor2502-011

This phenomenon occurs mainly in streams, even in intermittent or ephemeral streams. By calculating water accumulation as generated from the digital elevation model using GIS tools, we identified 138 intersections between those streams and the trails. The coordinates and elevation of those points and their distribution along the different sections and side trails are provided in the annexes. The intersections merit attention to make them climate-smart with an appropriate drainage system and reinforcement of their structure to avoid collapse and damage. They should be regularly checked, and the neighboring streams cleaned from solid wastes and debris that could obstruct water flow and proper drainage. The data relating to trail lengths subject to erosion by risk category and by sections are provided in the annexes. These are crucial to identify the location of priority areas for action to reduce erosion risk. Activities like vegetation restoration, protection from cutting or grazing or terracing can be implemented to reverse land degradation. Erosion risk is common in mountain regions due to slope, heavy rainfall, vegetation degradation, and soil texture. Almost all the sections show high or very high erosion risk (**Annex 2**). **Table 34** showcases the length of the trails as grouped by erosion risk levels.

**Table 33: Trail length segregation based on mass movement risk categories**

Mass movement risk	Length (m)
High	115,006
Moderate	158,563
Low	114,182

**Table 34: Trail length segregation based on erosion risk categories**

Erosion risk	Length (m)
Very high	160847
High	121119
Moderate	274571
Low	22429
Very low	634

- iv. **Vegetation and snow cover variability.** The Normalized Differentiated Vegetation Index (NDVI) is largely used to assess the status of the vegetation cover and its change across seasons and the years. The increased linear trend in NDVI for the past decades indicates a general increase in biomass in most mountain areas (UNDP LDN and Step4nature projects, not published yet). This is mainly related to natural vegetation dynamics when major disturbances are absent; grassland and shrublands tend to evolve into open woodlands and further dense forests (i.e. vegetation succession). Other factors affect vegetation cover, including overexploitation, snow cover, or precipitation patterns (**Annex 6 and Annex 7**).

Drought is a climatic phenomenon common in the Mediterranean region. During the past decades, drought has become recurrent, severe, and prolonged due to climate change. Analyzing drought indices using remote sensing data for at least 15 years can provide tendencies and prospects for better coping with it and managing natural resources. Drought risk is a multiplier of hazard and vulnerability. Hazard is related to climate-related exposure to drought, while vulnerability is affected by the degree of impact. According to the International Water Management Institute (IWMI) report<sup>49</sup>, the most hazardous areas along the LMT include Rachaya, southern Mount Lebanon, West Beqaa, Batroun, and Akkar. Agriculture and natural ecosystems are among the most vulnerable sectors, where fruit orchards, pine nuts, and summer crops are the most affected crops by drought.

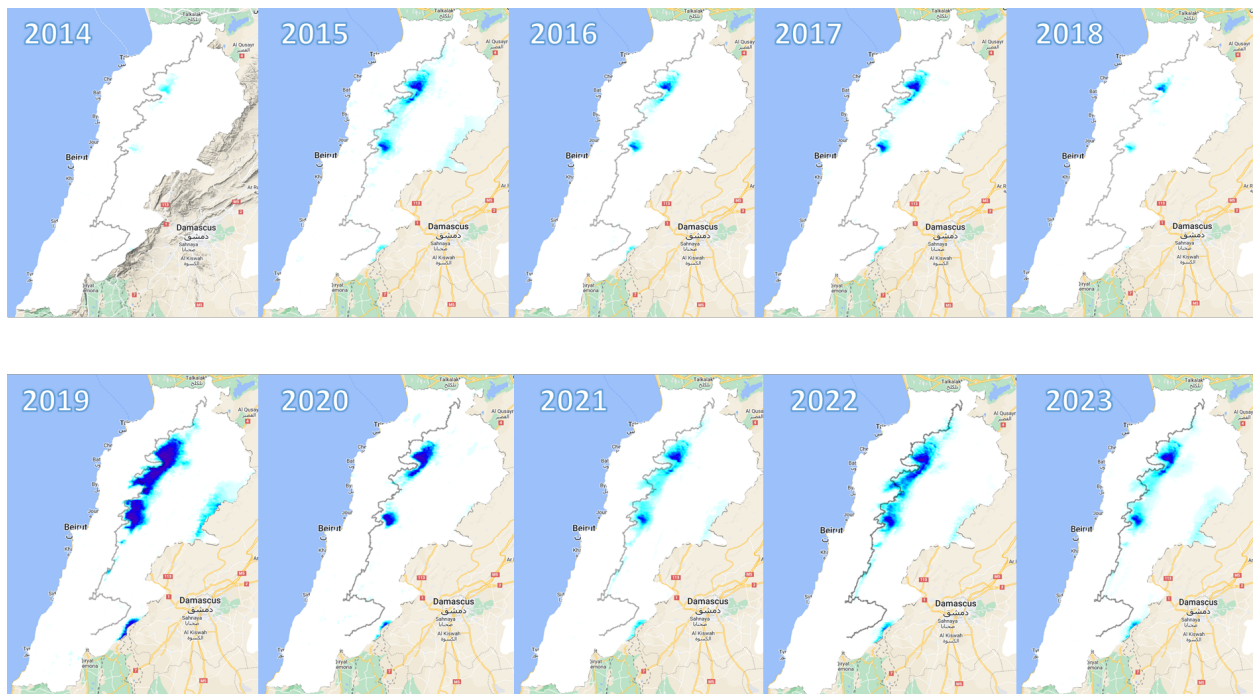
<sup>49</sup> Fragaszy, S.; Fraj, M. B.; McKee, M.; Jobbins, G.; Fayad, A.; Fakh, M.; Lawrenson, L.; McDonnell, R. (2022). *MENA drought synthesis of drought vulnerability in Lebanon: final report*. Project report prepared by the International Water Management Institute (IWMI) for the Bureau for the Middle East of the United States Agency for International Development (USAID). Washington, DC, USA: USAID; Colombo, Sri Lanka: International Water Management Institute (IWMI). 67p. doi: <https://doi.org/10.5337/2022.205>

Livestock herders and farmers in mountainous areas are usually the most vulnerable groups. Other sectors like tourism and the water-related sectors are also vulnerable.

Snow cover on the other hand is decreasing rapidly, with more than a 30% reduction in the time of snow residency at elevations below 1900m. However, the snowing period is becoming highly uncertain, with late snow in spring, which can affect circulation and activities along the trail. Hence, calculating the normalized standard differentiated snow index (NSDSI) and its trend line over the years can provide an idea about future predicted snow patterns (**Figure 19**). The sequence of maps between 2014 and 2023 show a clear increase in the spring snow cover in the north and central parts of Mount Lebanon.

An early snowmelt will induce a rapid growth of grass, which can cover and dissimulate the trail in April, requiring early blazing intervention. Late snow can cover the trail, making it difficult to walk without snowshoes. Assessing the timing of snow disappearance day (SDD) starting October 1<sup>st</sup> and mapping it is helpful to prioritize actions along the LMT. Snow cover frequency (SCF) provides insights into the percentage of days with snow cover compared to a year and is useful to assess the feasibility of winter tourism. **Table 35** compiles all three snow indices and the average value of each in each section. The average value for a range of years with available free data:

- between 2015 and 2024 (9 years) for NDSI
- between 2001 and 2019 (19 years) for SDD
- between 2000 and 2018 (19 years) for SCF



**Figure 19: NSDSI trends between 2014 and 2023**

**Table 35: Snow indices values and years above value per LMT section**

Name	Elevation (m)	NSDSI average	Number of years above NDSI average	SDD average	Number of years above average SDD	SCF average (%)	Number of years above SCF average
Section A1	873	0	0	0	0	0	0
Section 1	1629	1.960	3	163	9	0.178	10
Section 2	2051	9.209	3	176	8	0.267	12
Section 3	1505	0.000	0	155	9	0.132	9
Section 4	1733	7.191	3	164	12	0.176	11
Section 5	1833	9.612	3	178	10	0.269	10
Section 6	1825	6.462	3	169	10	0.214	10
Section 7	1409	0.229	3	159	11	0.199	10
Section 8	1971	20.887	2	186	9	0.305	10
Section 9	1875	9.127	4	169	10	0.221	10
Section 10	2077	24.140	2	185	10	0.301	9
Section 11	1885	17.015	3	176	11	0.247	10
Section 12	1680	3.699	3	156	9	0.145	10
Section 13	1578	6.953	3	164	11	0.200	10
Section 14	1701	8.281	4	177	9	0.246	11
Section 15	1573	7.217	4	168	9	0.195	9
Section 16	1603	1.583	2	152	7	0.106	11
Section 17	1558	1.093	4	152	7	0.104	12
Section 18	1894	4.479	4	168	11	0.222	8
Section 19	1833	5.232	4	172	8	0.231	8
Section 20a	1314	0.596	1	149	5	0.071	11
Section 20b	1343	0.035	1	160	9	0.163	11
Section 21	1378	0.000	0	0	0	0	0
Section 22	1755	1.683	3	0	0	0	0
Section 23	1219	0.631	2	0	0	0	0
Section 24	1229	0	0	0	0	0	0
Section 25	1397	0	0	0	0	0	0
Section 26	741	0	0	0	0	0	0

It is evident from the results that the frequency, extent, and period of snow cover is drastically changing, with a general decreasing trend along the LMT. However, in the southern Mount Lebanon range, the Chouf is the most severely affected by snow decrease. The impact is less evident at similar or higher elevations in north Lebanon. Above 2000m, some sections record an increase in snow cover extent or frequency over the years. This trend has been observed when studying NDSI tendencies under the strategic land use planning for the high mountains under the UNDP LDN project (results not published yet). It is worth mentioning that a longer snow cover frequency late in spring and a late snow disappearance day, do not necessarily imply a thick and persisting snow cover.

From the results illustrated above, it is obvious that the SBR should reconsider its winter activities due to drastic decrease in snow cover, while on the highest points of some sections, snow might be persisting in patches during the April through-walk.

- v. **Waste Discharge** Waste is a major environmental issue in Lebanon. Solid waste is dumped informally almost anywhere close to roads, or trails. Wastes are not only a visual or chemical pollution, but they can also be later problematic as they affect the neighboring economic sectors, when handled inappropriately, they can trigger or amplify fires, emit greenhouse gases, or change the land use, when covered with other material. The Human Rights Watch reported the burning wastes in informal dumping sites, focusing on the impact on health and the role of the different ministries. According to the report and based on data from the MoE and UNDP, as of 2017 there are 941 open dumps in the country (**Figure 20**), including 617 municipal solid waste dumps, with at least 150 open-burned at least once a week on average<sup>50</sup>. Some of these dumping sites are in villages along the LMT and side trails, but these are not mapped yet. Another problem of open burning dumping sites is that they can highly induce fire risk in the neighboring areas to the discharge site. The root problem of waste is the socio-economic context where the culture of limiting consumption, reusing, or recycling is limited. Sorting at the source is very constrained. Moreover, tourists can increase the problem instead of limiting it, as they throw their trash along the trails. To date, single-used water bottles and other plastic packages are not mandatory within protected areas. Informal waste discharge sites should be monitored and surveyed along the LMT. Further, priority actions should be considered for each village or a cluster of villages to find tailored solutions locally.

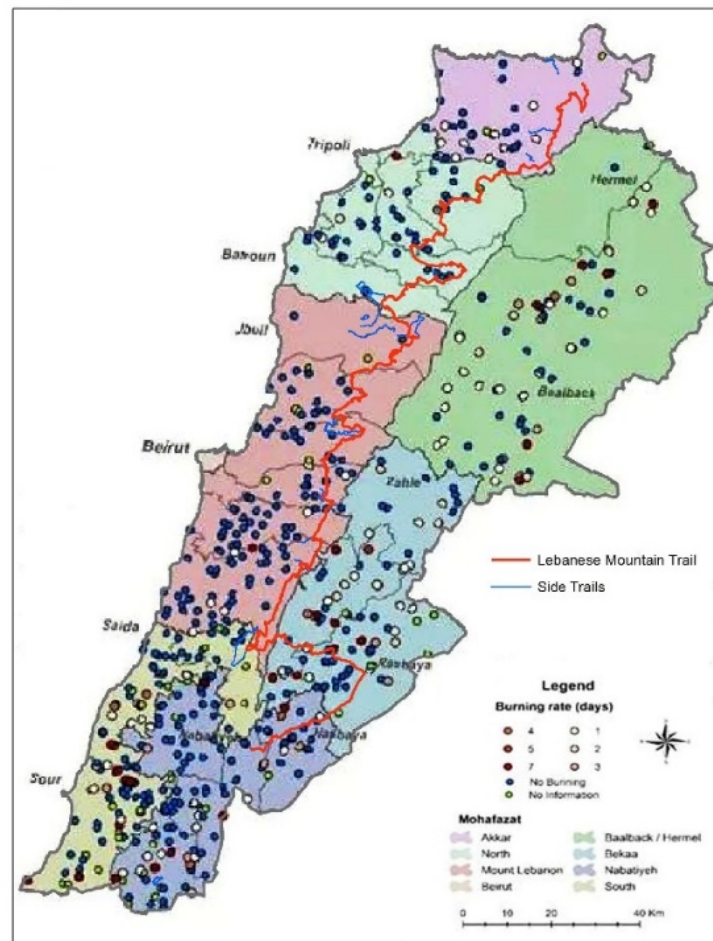


Figure 20: Map of open burned dumping sites

(Source HRW)

<sup>50</sup> [https://www.hrw.org/report/2017/12/01/if-youre-inhaling-your-death/health-risks-burning-waste-lebanon#\\_ftn17](https://www.hrw.org/report/2017/12/01/if-youre-inhaling-your-death/health-risks-burning-waste-lebanon#_ftn17)

vi. **Refugees impact.** In 2023, the United Nations interagency produced a map showing the localities having the highest vulnerability to the influx of refugees, and the highest pressure on natural resources. Among the 335 localities identified, all 5 villages across the LMT in Akkar are vulnerable, Beqaa Sifrine in Donnieh, Kfardebiane in Keserwan, Jezzine, Qaraaoun, Rafid in West Beqaa, Rachaya, Hasbaya and Marjaayoun (**Figure 21**). The deprived populations include Lebanese living under the poverty line mostly in host communities, and the refugees. The major impacts include the pressure on natural resources and their depletion due to overexploitation. The map is not inclusive but highlights the most important localities facing those pressures in localities where refugees are registered. The presence of refugees exacerbates additional threats such as water pollution, waste discharge, forest fires, and changes in land use. The rising conflicts over resources may result in social unrest and insecurity.

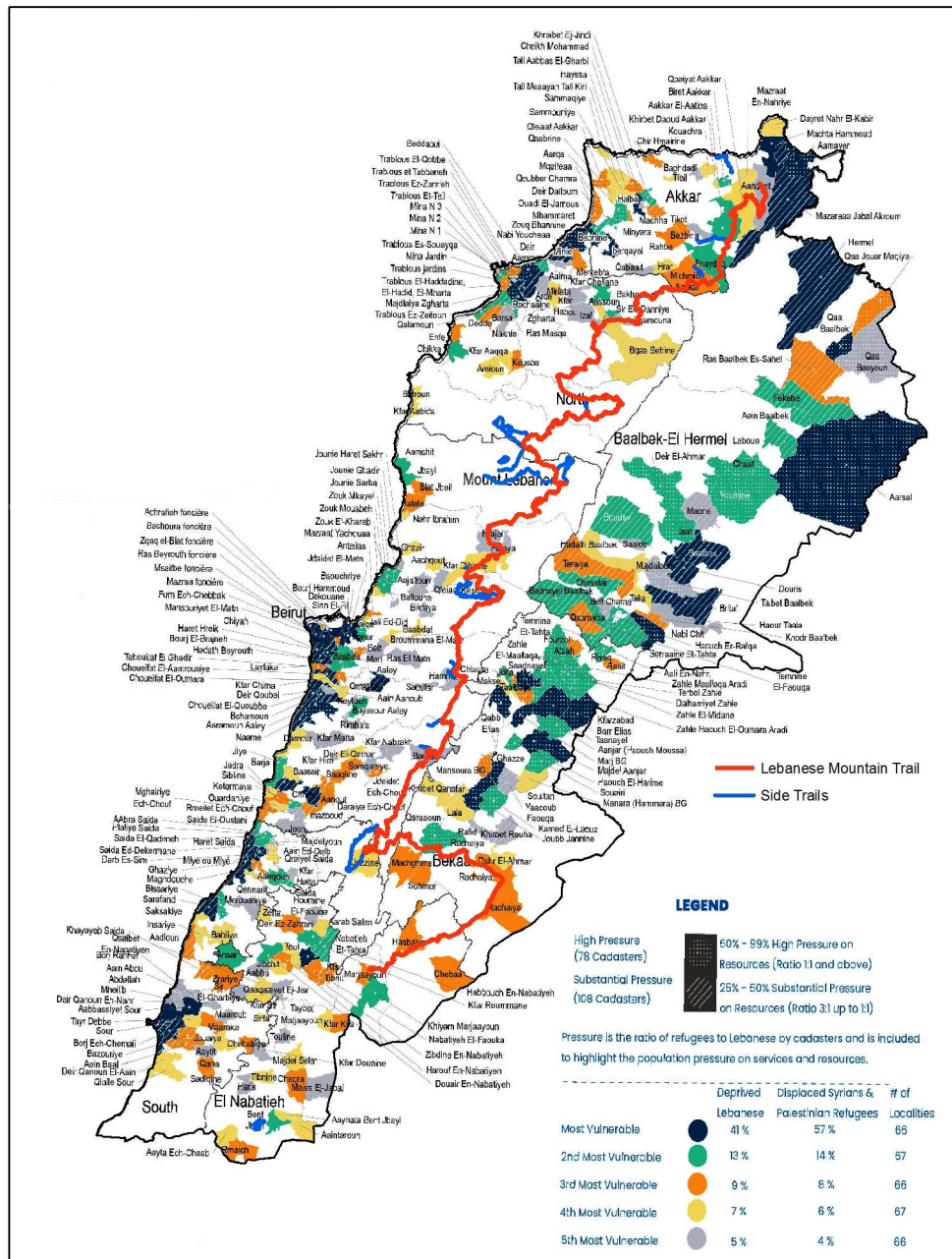


Figure 21: The 335 localities with the highest number of deprived populations and pressure on natural resources

vii. **Quarries and sandpits** Quarries and sandpits are extractive activities resulting in artificial man-made land cover, devoid of vegetation, with bare rocks. Quarries have a specific category in the land use and land cover map. However, these sensitive areas that are highly destructive are mapped under a few projects due to the significance of their impact on the environment. The sector is highly disorganized, uncontrolled, and illegal and experienced a dramatic increase during the civil war until 2018 to respond to the demand for construction materials. A reduction in these activities is observed since 2019, but the scars on the landscape will last for a very long time. An assessment conducted by the UNDP cites between 1800 and 2400 quarries and sand pits in Lebanon in 2019, while Atallah showed quarries that contradict or not with the NPMPLT (Figure 22).

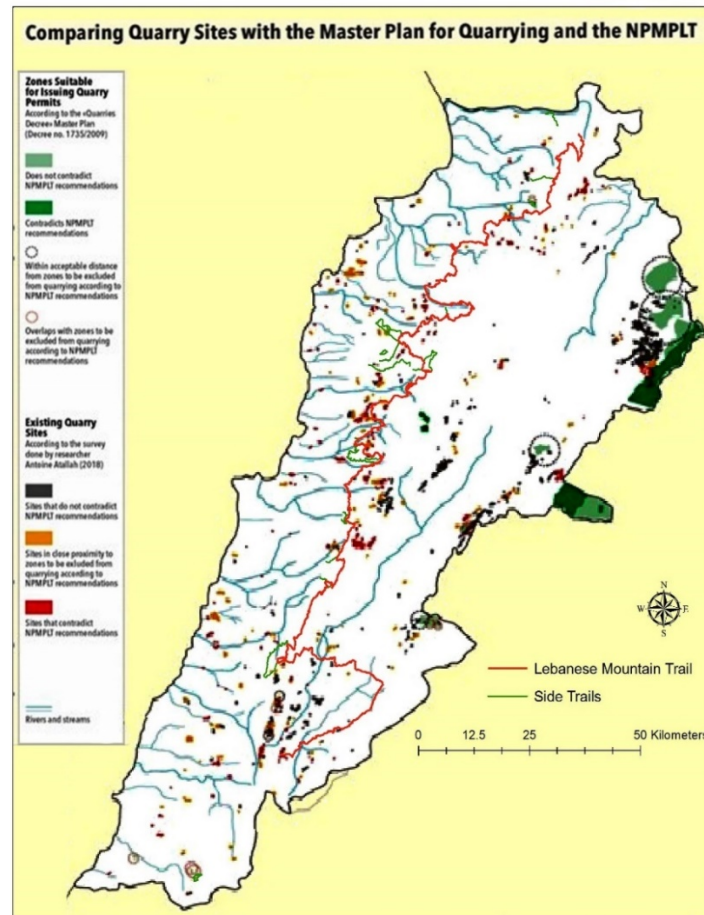


Figure 22 : Quarrying sites according to the quarrying master plan compared with the NPMPLT sites (Atallah, 2019)

Quarries and sandpits not only are responsible for natural ecosystems destruction, but also alter the hydrological system (ground water recharge, surface runoff), leading to deteriorated water quality, reduced water flow in neighboring springs, and an increase in flash floods downstream. Moreover, dust deteriorate human health and habitat quality in the neighboring areas. In regard to the LMT, quarries can compromise the viability of the trails, and the need to find alternatives on some sections like in Jayroun (Donnieh), or completely avoided by moving to different zones (Qamez-Mayrouba, Tarshish-Aintoura, Ain Dara). A policy on integrated management of the quarrying sector was approved by the government in 2019, but never saw the light due to the events following October 17<sup>th</sup> of the same year.

viii. **Landmines and security issues.** Landmines from the civil war are scattered across Lebanon. The LMT is not in direct encroachment with mined areas. However, changing the trail and the creation of new side trails should consider the land mines locations. Across the LMT, areas like Hadath el Jebbeh, Qnat, Niha, Tannourine, Baskinta, Ain Zhalta, and Jezzine to Machghara have mined grounds. Most of the zones are fenced with altering signages. The general directorate for geographic affairs at the Lebanese Army has produced maps for those areas, however, since 2006, these have not been made public since the land mines might have shifted in place due to erosion, landslide, and surface runoff. Moreover, since the July war of 2006, fragmentation bombs have been thrown practically in all the areas bordering Israel, and these cannot be mapped. Several organisms have been assisting the Lebanese Army in removing the landmines across the country. However, this delicate time-consuming task will take long before being achieved. Other areas are avoided due to informal security zones (Karm Chbat, Niha el Chouf, Machghara, Chebaa, Kfarshouba, Kfar Hamam, Hebbariyeh).

### III.3.7 Key actors and initiatives mapping

**Key actors.** Key actors are split into two categories: i) national and regional actors, present at the national or mohafazat scale, ii) local actors, present at the village or cluster of villages scale. Public institutions, UN agencies, academic and research institutions, large NGOs, and religious institutions prevail at the national and regional levels. **Table 36** entails a list of major entities and a brief description of their mandate. The list is not exclusive, since several other aspects can be indirectly linked to the environment. Moreover, the main role does not reflect all the activities conducted by the actors, but rather those who are part of their mandate, core mission, and vision, and related to the environment, or those that made up their strong environmental portfolio. It is reckoned that under the current dire conditions in Lebanon, most actors have serious constraints in delivering their services, namely public institutions. The wearing down of human and financial resources in the private sector and NGOs is putting them in a difficult situation too. Several UN agencies assist public institutions in sustaining their minimal services and roles. Among the national scale projects, the assistance to the MoE under the three conventions related to climate change, land degradation neutrality, and biodiversity or other international agreements:

- Fourth national communication to climate change (2023)
- Tracking the adaptation and mitigation actions to the National Determined Contribution to climate change (in process)
- National Biodiversity Strategy and Action Plan (in process)
- Persistent Organic Pollutants report update (in the pipeline)

**Table 36: Main national actors and their respective roles**

<i>Institution/agency</i>	<i>Main role (concerning environment)</i>
<i>CDR</i>	Strategic land use planning, public works
<i>MoA</i>	Natural resources management (forest resources, rangeland, water harvesting), pest monitoring, law enforcement through forest guards, and extension service to farmers. Supervision over protected forests and communal land leases. Establishment of protection from grazing.
<i>Green Plan</i>	Land reclamation for agriculture, water harvesting, agriculture roads opening. Direct support to farmers
<i>MoE</i>	Environmental laws monitoring and guidelines. Environment studies, compliance, and impact assessment. Establishment and supervision over protected areas.
<i>MoPWT-GDUP</i>	Urban planning and zoning, public works (roads), transport regulations, weather forecast.
<i>MoEW-Water establishments</i>	Water and energy strategies, management, and monitoring. Water distribution services through regional establishments. Dam and hydropower construction.
<i>Mol-Internal Security Forces-Civil Defense</i>	Law enforcement (including environmental laws), forest fire fighting, security, rescue, traffic monitoring, and road opening.
<i>Lebanese Army</i>	General security, removal of land mines, mapping, forest fire fighting, pest monitoring (aerial spraying), rescue/evacuation.
<i>MoET</i>	Responsible for trade agreements, quality certificates, geographical indexing, copyright and patent, subsidies to wheat farmers, and consumer protection.

<i>Institution/agency</i>	<i>Main role (concerning environment)</i>
<i>UNDP</i>	Resource mobilization and implementation of environmental projects, technical support, and assistance to public institutions. Key fields include biodiversity conservation, climate change, land degradation neutrality, and rural development.
<i>UNESCO</i>	Support the establishment and governance of (man and nature) heritage sites, biosphere reserves, and geoparks.
<i>FAO</i>	Resource mobilization and implementation of agricultural projects, technical support, and assistance to the MoA, Green Plan, LARI, agriculture cooperatives, and farmers. Key fields include agriculture (and food processing), forestry, rangeland, and fisheries.
<i>IUCN</i>	Technical support for biodiversity conservation at large, including the establishment of protected areas and OECMs, species ex-situ and in situ conservation, anti-poaching activities, and monitoring threats to ecosystems and species (red lists)
<i>LARI</i>	Species ex-situ conservation (seed bank), soil and water analysis, weather forecast, research, and development mainly in agrobiodiversity, soil sciences, pathology, and water resources management.
<i>CNRS</i>	Risk reduction and management (fire, floods, landslides, erosion, drought, earthquakes, radiation), land use land cover monitoring, remote sensing for various environmental fields, soil and marine sciences.
<i>LU</i>	Diplomas and research in forestry, ecology, biodiversity, natural resources conservation, geosciences, agronomy, and related fields. Veterinary program.
<i>AUB</i>	Diplomas in environment and health, food sciences, life and earth sciences, biodiversity conservation, and related fields.
<i>USJ</i>	Diplomas in life and earth sciences, agronomy, and land use planning.
<i>USEK</i>	Diplomas in life and earth sciences and agronomy.
<i>UOB</i>	Diplomas in agronomy, marine sciences, environmental sciences
<i>AFDC</i>	Forest fire fighting and risk reduction, reforestation, ecosystem restoration, awareness, and capacity building.
<i>Jouzour Loubnan</i>	Reforestation, conservation of endemic species
<i>LRI</i>	Forest fire prevention, reforestation, ecosystem restoration, forest management, trailblazing, Youth Conservation Corps program. awareness
<i>ACE</i>	Geology and environment awareness program. Advocacy for geoparks
<i>SPNL</i>	Advocacy for Hima concept, awareness, and Hima management plans
<i>Terre-Liban</i>	Advocacy for the environment and environmental laws.
<i>Arc-en-Ciel</i>	Environmental awareness, waste management, support to farmers
<i>RMF, LOST, ACTED</i>	Support to farmers and municipalities in various fields
<i>MADA</i>	Rural development, support to farmers, awareness, and advocacy to create a park in Akkar Heights.
<i>Waqf stewards</i>	Main landowners under centralized orders or congregations.

The scopes of the different local entities vary a lot. We list the main ones in **Figure 23**. Three groups can be considered:

**i) protected areas committees.** There are five protected areas with active committees along the LMT and side trails: Ehden, Qadisha, Tannourine, Jaj, Jabal Moussa, and Shouf Biosphere Reserve. Next to the trail are other protected areas without any committee, such as Karm Chbat. All nature sites lack committees. Not all committees are equally active, and the most prominent committee is the Al Shouf Cedar Society (ACS), which has a catalyzing role in rural development and environmental conservation beyond the limit of the reserve and is seeking to connect with other protected areas surrounding it through a network of partnerships. Unlike the protected areas committees, which are provided with technical personnel, the Qadisha committee has representatives from different entities like municipalities and is similar to a steering committee for projects under the “Qadisha Durable” program. It lacks a technical or operational staff.

**ii) Municipalities and Unions of Municipalities.** Himas and protected forests are mainly managed directly by the municipalities, and sometimes with the support of the union of municipalities. The most active municipalities are displayed in Figure 10. They include those who invested in establishing side trails and forest management plans like Menjez, Ehmej, Jezzine, and Aitanit. Others, currently dissolved or partially inactive have acquired a long history of environmental stewardship such as Qobayat, Aqoura, Hammama, Ibl el Saqi, Kfarmeshki, and many more. Among the active unions, we mention those of Jezzine and Keserwan who are seeking a more strategic perspective for their land cover and land use. Many potential actors are currently inactive (dissolved municipalities...).

iii) Local NGOs and CBOs have various objectives, scopes, and capacities. Aakkar Trail is the most prominent since this recently established NGO has rapidly acquired the know-how and the capacity related to forest fire fighting, biodiversity assessment, and conservation, the establishment of a herbarium and an insectarium, as well as a seed bank and a nursery to promote the plantation of native rare and endemic species. They cover all Aakkar and beyond. Others have a different mission such as the Environmental Council which focuses on awareness raising under multiple activities like thematic hikes or seminars, and the reef festival, which attracts tourists to Qobaiyat. The Friends of the Cedars of Bcharri is a reckoned association established with a core mission of establishing a cedar corridor between the cedars of Bcharri and those of Ehden and Tannourine. However, with experience, they have developed their nursery, broadened their activities, and are currently mainstreaming biodiversity conservation. The remaining NGOs or CBOs are mainly active at the village scale and have recently joined the circle of entities dedicated to environmental advocacy.

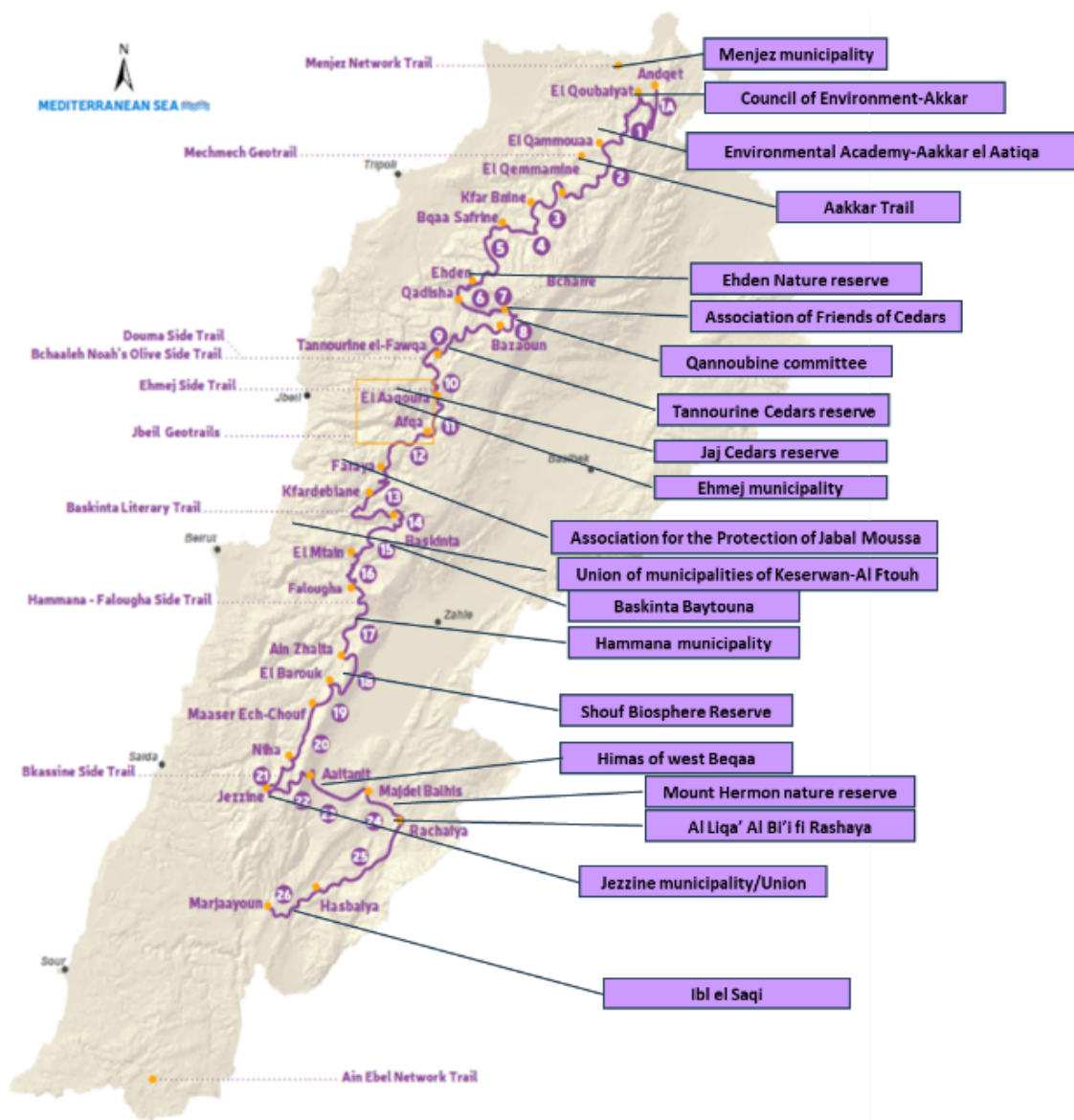


Figure 23: The main environmental local actors along the trails

**Initiatives mapping.** ECODIT is currently updating the list of ongoing projects related to agriculture, environment and emergency sectors. A final list should be available by end of June 2024. Nonetheless, the list focuses mainly on the nexus of livelihood of host communities and/or refugees from one hand and the agriculture sector and related fields (water, forestry, fisheries, etc) from another hand. However, mapping environmental projects and initiatives focuses therefore on those which main objective or specific objectives are targeting environmental issues. An environmental collateral benefit which is not accounted in the project description and design cannot be considered as an environmental initiative. Similarly, projects where the scope of action is away from the LMT villages, cannot be considered as an initiative along the trails. Below we list those that are directly addressing environmental concerns and found within the villages where either the LMT or its side trails are crossing.

#### UNDP Land Degradation Neutrality

- Strategic land use planning for high mountains (1500m and above)
- SEA for high mountains
- Local development action plans: emphasis on Akkar and Jbeil
- Management plans for forests in Ehmej, Aakkar el Atiqa, Bazbina
- Management plan for Jaj cedars nature reserve
- Management plans of rangelands of Akkar and Jbeil heights, with detailed plans for Andqet, Aqoura and Lassa.
- Restoration of quarries, support to the nursery of Aakkar Trail, reforestation activities in Aalmat, Jaj, Aakar el Atiqa training on good agriculture practices for farmers in Jbeil and Akkar
- Rehabilitation of irrigation channels in Fneideq and drip irrigation in Ehmej and training on sustainable water efficient use
- Establishment of geotrails in Jbeil and Akkar heights, and feasibility for the establishment of a geopark in Jbeil mountains.

#### UNDP Step4nature

- Biodiversity assessment for habitats, flora, fauna and fungi for nature reserves
- Management plans for nature reserves, including Ehden, Tannourine along the LMT
- Support to nature reserves (entrance, toilets, solar panels, etc.)
- Revision of the legal framework for protected areas
- Studying the nexus between biodiversity, climate change and tourist behavior in protected areas.
- Updating the forest fire risk assessment and management plans for the nature reserves

#### ACS/OIKOS/SPNL/ADR/MORES-BIOCONNECT

- Biodiversity assessments in Shouf Biosphere, Mount Hermon, Hammana, Ras el Matn, Aitanit, Ain Zebdeh, and Ibl el Saqi.
- Management plans for the hima and for Mount Hermon
- Rangeland management plan for Mount Hermon
- Restoring terraces in the Shouf area
- Study/biodiversity and potential geo-site assessment to establish a geopark in Jezzine, southern mount Lebanon, and Beqaa
- Defining connectivity areas between protected areas of the southern part of Lebanon
- Reintroduction of the Nubian Ibex program to SBR
- Biodiversity Monitoring Schemes

OIKOS-RESILAND

- Water assessment for Jabal Moussa and SBR.
- Rangeland management plan for Jabal Moussa
- Management Plans for SBR and Jabal Moussa
- Forest fire risk assessment review for Jabal Moussa
- Terraces restoration in Jabal Moussa and SBR
- Efficient irrigation techniques in SBR
- Forest management to reduce fire risk and produce briquettes in SBR
- Reforestation in SBR

Qadisha Durable

- The Auvergne-Rhône-Alpes Region (AuRA) is supporting the stakeholders in Bcharri and surroundings on different themes (energy, water sanitation, economic development, mountain development, etc.).
- Several projects (touristic and agricultural development, water resources, and climate change) have been implemented in Bcharri Caza with the support of French communities and technical partners, like the French NGOs Tétrakty and "Corail Development".
- The Federations of the municipalities of Bcharri and Zgharta cazas requested from their French partners to support them to create a governance entity for the Qadisha Valley, inspired by the French model of Regional Natural Park. This is how the "Qadisha Durable" program was created, aiming to create the conditions for sustainable economic and social development with benefits for local populations and businesses.
- The "Qadisha Durable" program is co-funded by the French Development Agency (AFD) and aims to create an institutional structure of shared governance across the Qadisha valley by the end of 2025. This association between the Federations of Municipalities of Bcharri and Zgharta cazas aims to promote the attractiveness of the territory and its economic and social development while protecting the existing natural and cultural heritage. The support to the Apple value-chain is one of the activities.

Terre-Liban/Lebanon Eco Movement CESNA project (closed)

- Legal framework for the Conservation of Environmentally Sensitive National Areas (CESNA) of Lebanon, with a focus on High mountains. A draft law was delivered by the EU-funded project.

FAO SALMA project (closed)

- Capacity building for establishing management Plans for different sites, including Aakkar Heights, Bcharreh, Ftouh and Keserwan communal lands, Hayata-Chahtoul, Aqoura Heights, Hammana along the LMT
- Biodiversity assessment of a few selected sites
- Guidelines for mainstreaming biodiversity in forest management plans
- National Forest Resources Assessment
- Reforestation activities in a few sites along the trail
- Training local mountain guides on flora, fauna, and biodiversity in general

### III.3.8 Comparative Analysis

**Cross-regional analysis.** The LMT sections' major environmental status as depicted from the literature and during recent surveys within some parts or sections are illustrated in **Table 37**. Several sections are under multiple pressures, mainly in the north, from the top end of the trail towards Beqaa Sifrine. The area is under anthropogenic pressure on natural resources related to poverty and the impact of refugees.

Moreover, the area is subject to overexploitation, fragmentation, and land use change, mainly in Aakar el Aatiqa and Qamouaa. Fire is a major challenge in pine forests and is becoming a threat to cedars and junipers. The second most threatened sections are from Aitanit towards Rachaya and further to Marjaayoun. The area is among the most vulnerable to climate change and is highly impacted by human activities such as uncontrolled grazing, intensive agriculture, water pollution, and waste discharges. The current situation in the south amplifies the negative impacts of frequent fires due to bombing, and the abandonment of agricultural lands. The section between Ehden and Tannourine is highly vulnerable to climate change, and the agriculture sector has been very impacted by climate adversity. Moreover, waste discharge, pest outbreaks, and land mines in some spots hinder any intervention. The section between Afqa and Faqra is also vulnerable due to land use change, land reclamation for agriculture, quarrying activities, and urban development.

**Table 37: The environmental status and major threats along the LMT sections and side trails**

Section	Overall environmental status	Section	Overall environmental status
Menjez	Very good	Ehmej-Aqoura geotrail	Land use change
Andqet-Qobaiyat	Change of land use, forest fire, biodiversity loss	Jaj geotrail	Very good
Qobaiyat-Qamouaa	Vulnerable to forest fire and uncontrolled cutting	Tannourine-Aqoura	Land use change, erosion, landslide
Mechmech geotrail	Land use change, climate change	Aqoura-Afqa	Land use change, illegal cutting
Qamouaa-Qmamine	Vulnerable to forest fire and uncontrolled cutting, biodiversity loss, and erosion	Afqa-Kfardebiane	Land use change, erosion, landslide
Qmamine-Kfarbebnine	Vulnerable to forest fire, land use change (quarrying), uncontrolled cutting, biodiversity loss and erosion	Kfardebiane-Baskinta	Land use change, erosion
Kfarbebnine-Beqaasifrine	Uncontrolled cutting, land use change	Baskinta	Land use change
Beqaasifrine-Ehden-Qozhaya	Climate change	Baskinta-Mtein	Erosion, land use change
Qozhaya-Bcharri	Uncontrolled cutting, waste discharge, erosion	Mtein-Falougha	Waste discharge, illegal cutting, land use change
Bcharri-Bazaoun	Land use change, climate change, biodiversity loss	Hammana	Climate change, erosion, landslide
Bazaoun-Hadath-Tannourine	Climate change, biodiversity loss	Falougha-Ain Zhalta	Land use change, erosion, biodiversity loss
Douma /Bchaaleh 1	Very good	Ain Zhata-Barouk-Maasser-Niha	Climate change (drastic decrease in snow cover)
Douma /Bchaaleh 2	Good	Niha-Jezzine	Forest fire, erosion, biodiversity loss, climate change
Ehmej 1	Erosion, land use change	Jezzine-Aitanit	Climate change
Ehmej 2	Good	Aitanit-Majdel Balhis-Rachaya-Hasbaya	Land use change, climate change
Baatara geotrail	Good	Hasbaya-Marjayoun, Ain Ebel	Land use change, climate change, security issues, biodiversity loss

### Cross-sectoral analysis

The consequences of the environmental stressors and anthropogenic pressure on natural resources are mirrored in the performance of the economic sectors such as agriculture and tourism. Socioeconomic stressors can induce a vicious cycle of deterioration leading to land degradation and desertification.

For instance, the load of the host communities and the persisting poverty in rural areas induce an additional depletion of natural resources and biodiversity loss. The uncontrolled cutting of trees for fuel wood in the past two years was evidence of such a situation.

Climate change is most impactful on both the agriculture and tourism sectors. Extreme climate events like hail, heatwaves, and late frost can induce a total loss of production. Farmers, vulnerable in the first place due to weak social safety networks and the absence of public support will show a low resilience to such incidents. If the climate adversely affects production for consecutive years, farmers may be obliged to abandon their land, lease it to Syrian workers, or change the land use. A change in agriculture patterns may affect tourism since food prices will rocket even within the guesthouses. Agriculture-related tourism can also be affected if the harvest season is compromised (apple or cherry picking, wine tasting, etc.). Climate uncertainty will affect the bookings for the “Thru-hike” and all the related activities will distress the rural population depending on it. The warming climate affects snow persistence and all winter-related tourism activities, while heat waves deter people from hiking during summer.

Change in land use is also a serious problem because it is irreversible. A mosaic landscape where natural ecosystems are blended with man-made landscapes such as agriculture fields and picturesque villages is attractive to tourists, especially if it preserves biodiversity, a cultural identity, and a landmark. However, land use planning is required to keep an equilibrium between the relatively wild and the artificial, and what is considered a cultural heritage. Anarchic urban expansion, public works (mainly roads), quarrying, waste discharge, fire, reforestation of monospecific forests (cedar or pine), inappropriate construction, and inconsistent architectural designs can rapidly deteriorate the landscape and make it reluctant to tourists. A loss of biodiversity, and the abandonment of agriculture and nature-related activities, will induce an erosion of the local know-how, which will affect the cultural identity. The production of “Shanklish” in Aakkar requires a mixture of dairy products from local goat and sheep races, a carefully collected mixture of wild aromatic herbs, and inherited local know-how. Every dish and recipe along the different trails, results from this interaction between the rural communities and their “terroir”. Removing or altering one component of these nexuses will be reflected in the end product or service, the livelihood, or the environment.

### III.3.9 Strategic recommendations for Environmental Conservation and Climate Change

A list of recommendations of equal importance and priority are listed below:

- *Revise and upgrade the legal framework related to the strategic land use planning of high mountains and their protection.* A multidisciplinary team of experts prepared the strategy under the UNDP LDN project for the MOE. The draft should be reviewed by the concerned ministries, approved by the government, and further transferred to the Parliament to be enacted as a law.
- *Review and improve the protected areas law and define the necessary regulations for each protection type including OECMs.* The UNDP Step4nature is contracting a law firm to conduct this study. Once published, it will follow the same process as any other law.

- *Review the current designation status of protected areas, and assign to it the most sustainable status, taking into consideration the protection of the landscape, the ecosystems, biodiversity, and the sustainable use of natural resources.*
- *Adopt a participatory approach for establishing additional protected areas or OECMs.* This approach should be explicitly mentioned in the suggested amendments to the law for protected areas. An initial exercise could be established under the BIOCONNECT project.
- *Lobby to achieve the cadastral delineation and conflict resolution related to land ownership, mainly in Akkar and Donnieh.* Despite the long process and the cost that it takes to finalize cadastral delineation. Preserving public domains, landscapes, and natural resources is the most pertinent and urgent issue to move forward in local action plans under any land use strategy. Other areas outside the north have the same issue and should be considered.
- *Capacity building for municipalities and unions to implement local action plans, land zoning, governance, and environmental awareness and compliance.* Any action at the local level should go through local authorities, which unfortunately are not ready in most cases. Their understanding of long-term visions, natural resources management, environmental challenges, and environmental laws is limited.
- *Identify and support Environmental Champions and Ambassadors along the trail.* Several individuals or private initiatives merit support. LMT guides are good candidates since some are already implicated in environmental advocacy or interventions. Supporting the champions will keep them moving forward and sensitize others to follow the same path.
- *Mainstream biodiversity conservation in reforestation activities and consider sustainability aspects (conflict over land use and water resources).* Planting trees has several environmental positive returns, but can also negatively impact biodiversity and natural resources that are precious to other users (water, fodder plants, melliferous, edible and medicinal plants, etc). Each site subject to restoration or management should benefit from an initial assessment of its flora and fauna and its ecological and conservation values. A socio-economic assessment is also key to avoiding conflicts over land and resources. An initial exercise was implemented under the FAO SALMA project for several managed sites along the LMT.
- *Monitor water resources quality and flow along the LMT.* An initial assessment was conducted in 2014, however, this kind of exercise should be implemented periodically, before the main thru hike (April and October), to update which springs are potable. A proactive approach would benefit from the results to take actions to improve water quality (and quantity).
- *Link the LMTA with research and academic institutions to develop internships in various fields along the LMT.* Involving students in the different assessments and studies is a co-benefit, as students and professors will be immersed in life and earth sciences, provide useful results, and further acquaint them with the LMT and their country. The LMTA will benefit from a low-cost analysis and open the association to new blood.
- *Conduct a full biodiversity assessment along the LMT.* This challenging work should be conducted by section, over at least one year, and mobilizing at least one student and one guide for each section. The work could be an opportunity for students to have their master's degrees, for the guides to *improve* their capacity in biodiversity,

and for the LMTA to better understand the richness of flora and fauna (to a certain extent) and define priority areas to take action (awareness raising, monitoring) for biodiversity conservation.

- *Finalize the remote sensing and GIS thematic maps to prioritize areas of action to reduce environmental risks like fire, landslide, floods, change of land use, etc.* GIS and remote sensing are powerful tools that allow us to shift from a descriptive approach to any studied sector towards an analytical approach across space and time. This study was an opportunity to define a digital baseline for several thematic aspects relevant to the management of the LMT. Environmental themes include water resources, fire, erosion, flash floods, mass movement, dumping sites, quarries, climate change, land cover and land use, fragmentation, vegetation degradation, snow cover residency and frequency, and others. Linkages between environment, culture, and tourism are possible.

A partnership between the LMTA and relevant actors like the MOE, MOA, CNRS, LARI, protected areas managerial committees, regional water establishments, and the Green Plan is a win-win liaison since the LMTA can be a hub for research and for monitoring several environmental issues, as the hikers and guides of the LMTA can be considered as the “eyes” of those institutions.

#### IV. CROSS SECTORAL ANALYSIS: TOURISM – ENVIRONMENT - CULTURE NEXUS

As conclusion of this sectoral assessment along the LMT, the following figure uses a Driving Forces-Pressure-State-Impact-Response (DPSIR) model to analyze the tourism, environment, and cultural heritage nexus in Lebanon (Figure 24). It highlights the intricate balance between economic benefits, environmental sustainability, and cultural heritage preservation along the LMT.

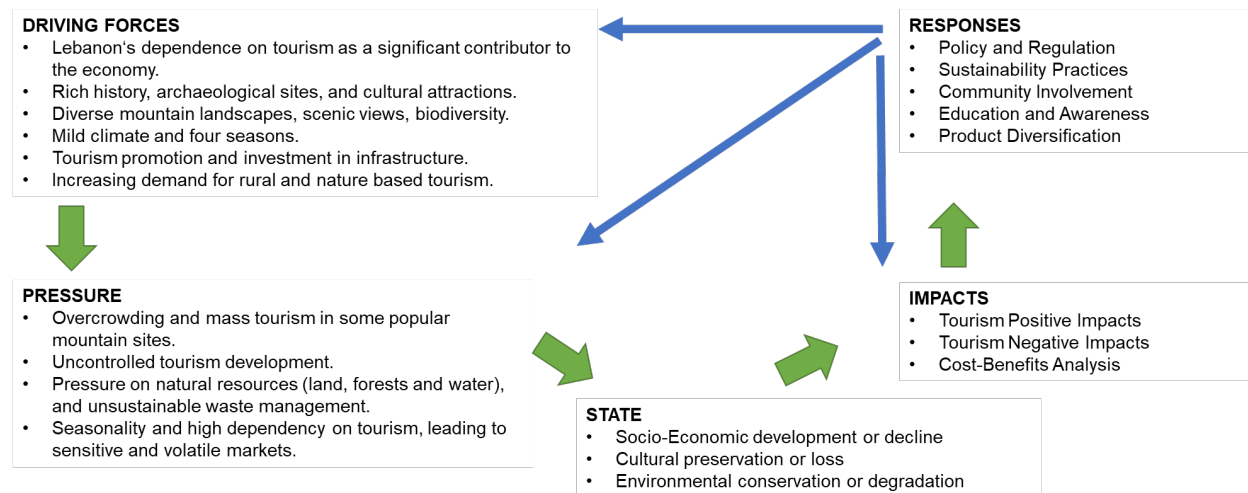


Figure 24: DIPSR Model for the tourism, environment, and cultural heritage nexus

Lebanon’s dependence on tourism is a significant economic driver, buoyed by the country’s rich historical and cultural attractions, diverse mountain landscapes, and favorable climate. Investments in tourism infrastructure and the growing demand for rural and nature-based tourism further fuel this sector. However, these driving forces exert considerable pressure on the environment and cultural heritage, especially in rural areas and along the LMT.

Overcrowding in popular mountain sites and uncontrolled tourism development threaten the integrity of natural resources, such as land, forests, and water. This strain is exacerbated by unsustainable waste management practices and the seasonal nature of tourism, which makes the economy vulnerable to fluctuations.

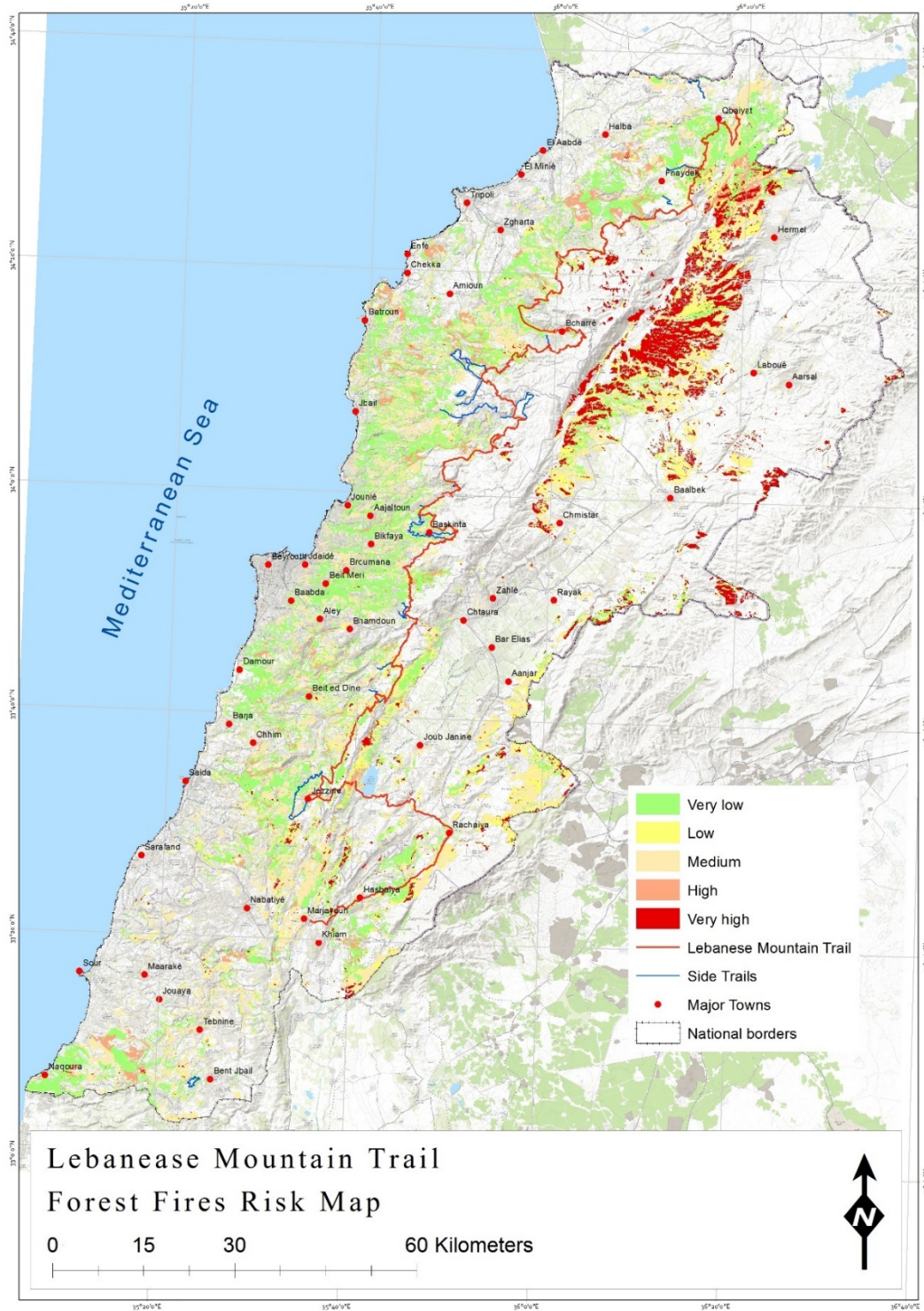
The state of Lebanon’s socio-economic development is closely linked to tourism, especially in rural and mountain areas along and close to the LMT. While it can drive economic growth and community development, there is a risk of decline if tourism is not managed sustainably. Similarly, cultural heritage faces the dual challenges of preservation and potential loss due to the commercial pressures of tourism. Environmental conservation efforts must also contend with the degradation caused by tourism activities.

The impacts of tourism in Lebanon and on the LMT in particular are both positive and negative. On the one hand, tourism boosts local economies, creates jobs, and can fund conservation projects. On the other hand, overdevelopment, resource depletion, and the commodification of culture pose significant threats. A thorough cost-benefit analysis is essential to balance these outcomes and inform sustainable planning.

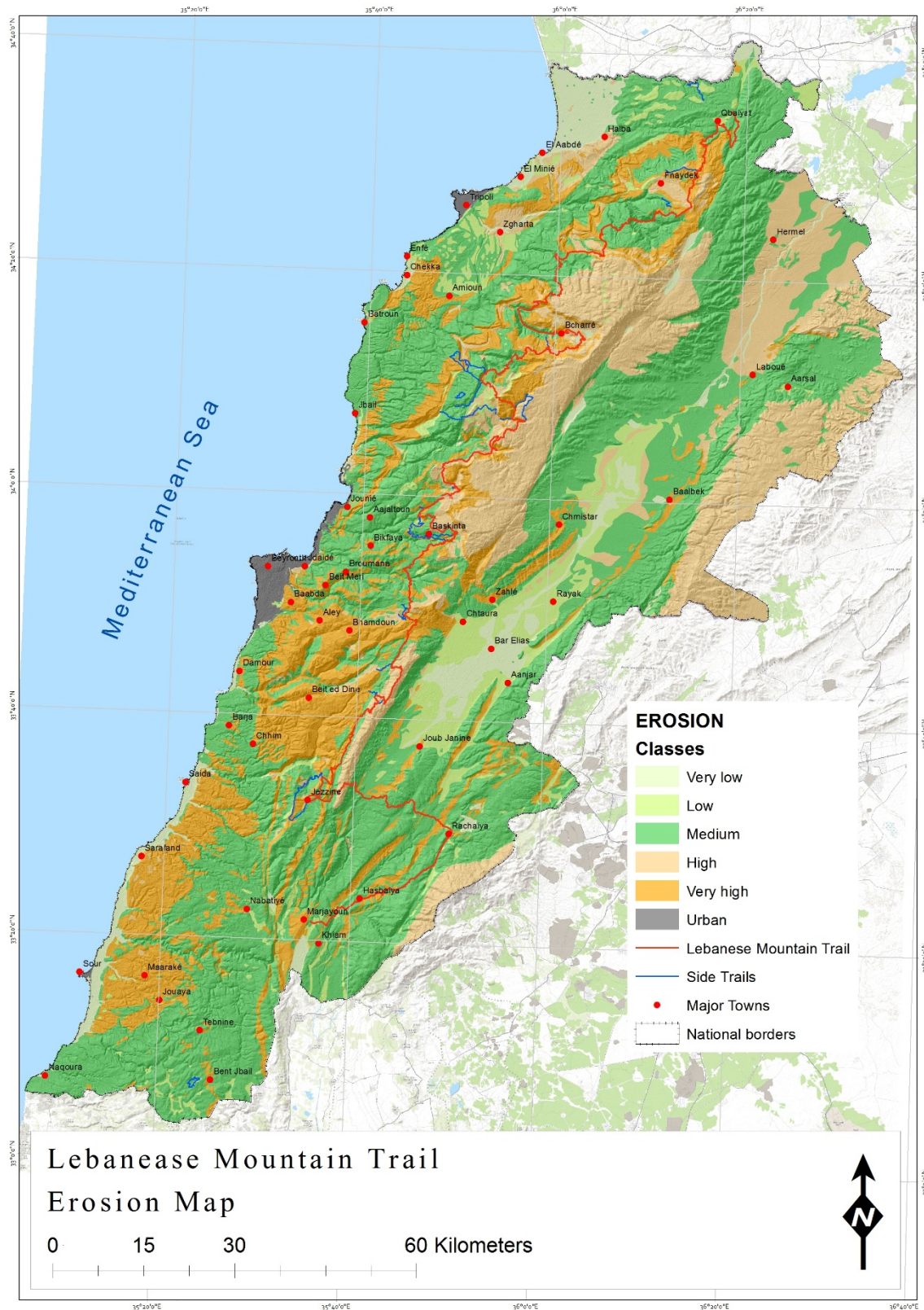
To address these challenges, a multifaceted response is required. Effective policy and regulation are critical to managing tourism sustainably along the LMT. Promoting sustainability practices, engaging local communities in tourism planning, and raising awareness about the importance of sustainable tourism are vital steps. Diversifying tourism products along the LMT can also help reduce the pressure on popular sites and distribute the benefits more evenly throughout the year.

Ultimately, the LMTA must navigate the delicate interplay between economic growth, environmental stewardship, and cultural heritage preservation. By adopting a holistic and sustainable approach, the LMTA can ensure that tourism continues to be a source of prosperity and pride for future generations along the LMT.

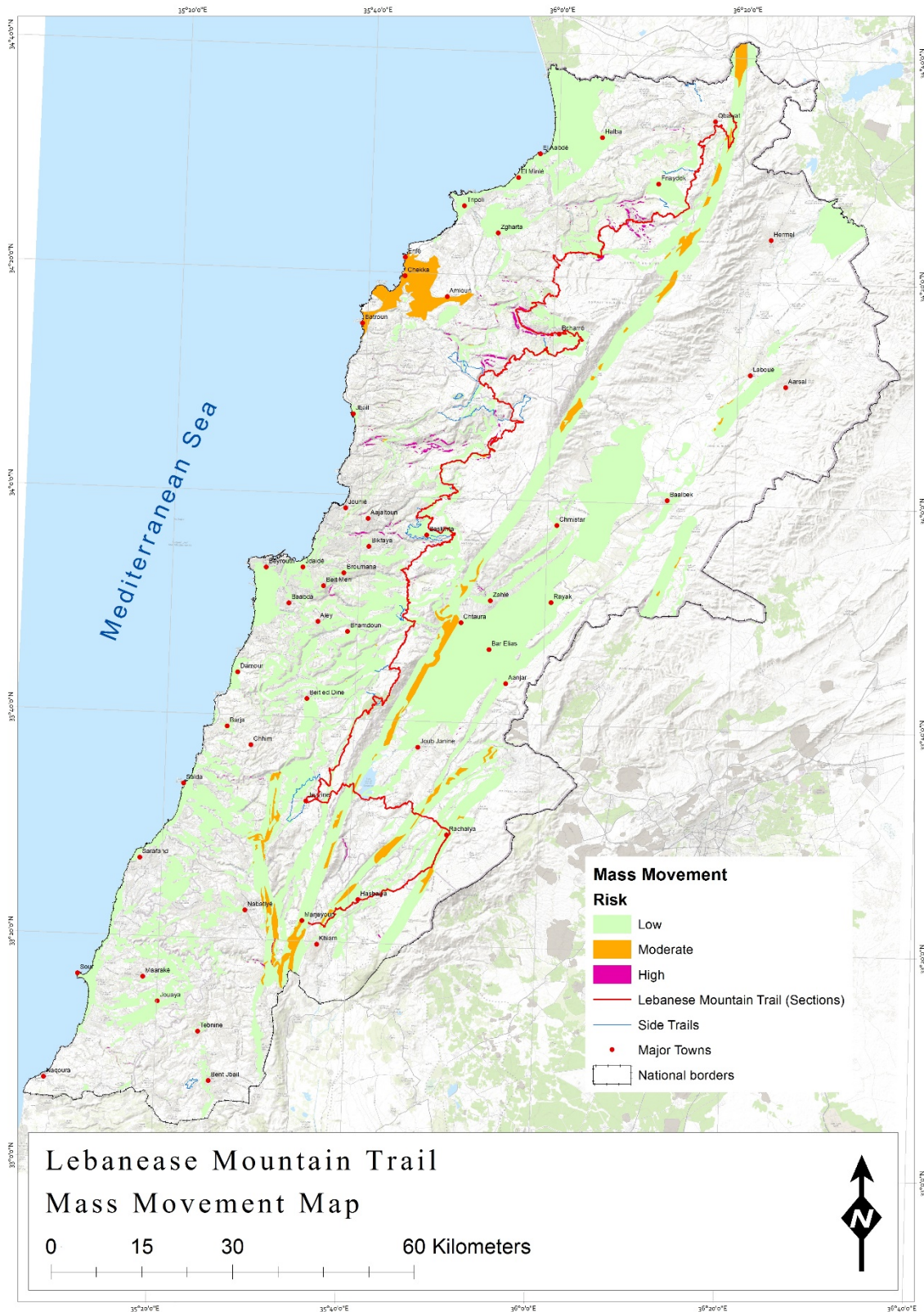
Annexes



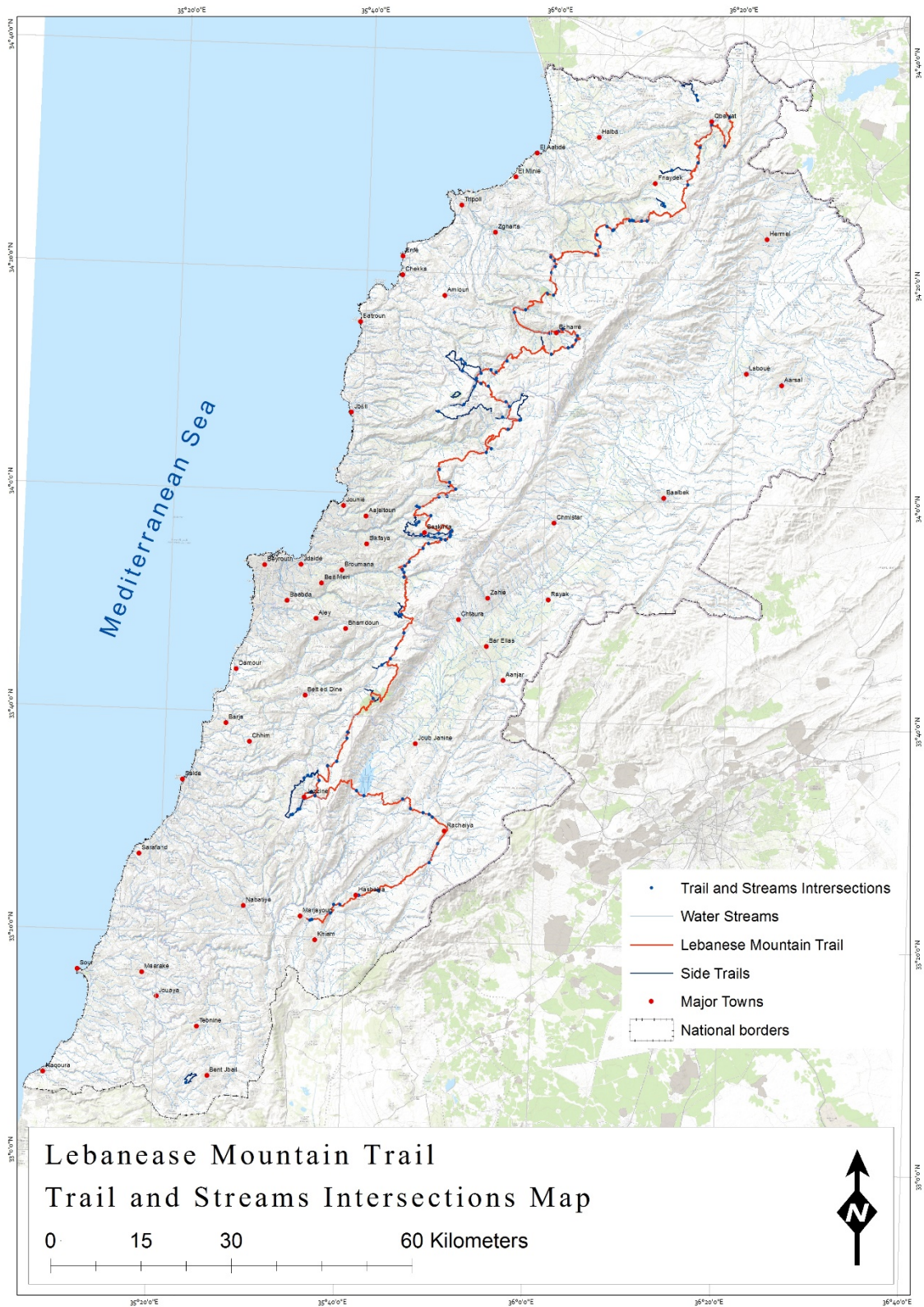
Annex 1: Forest fire risk map (NCRS-UOB)



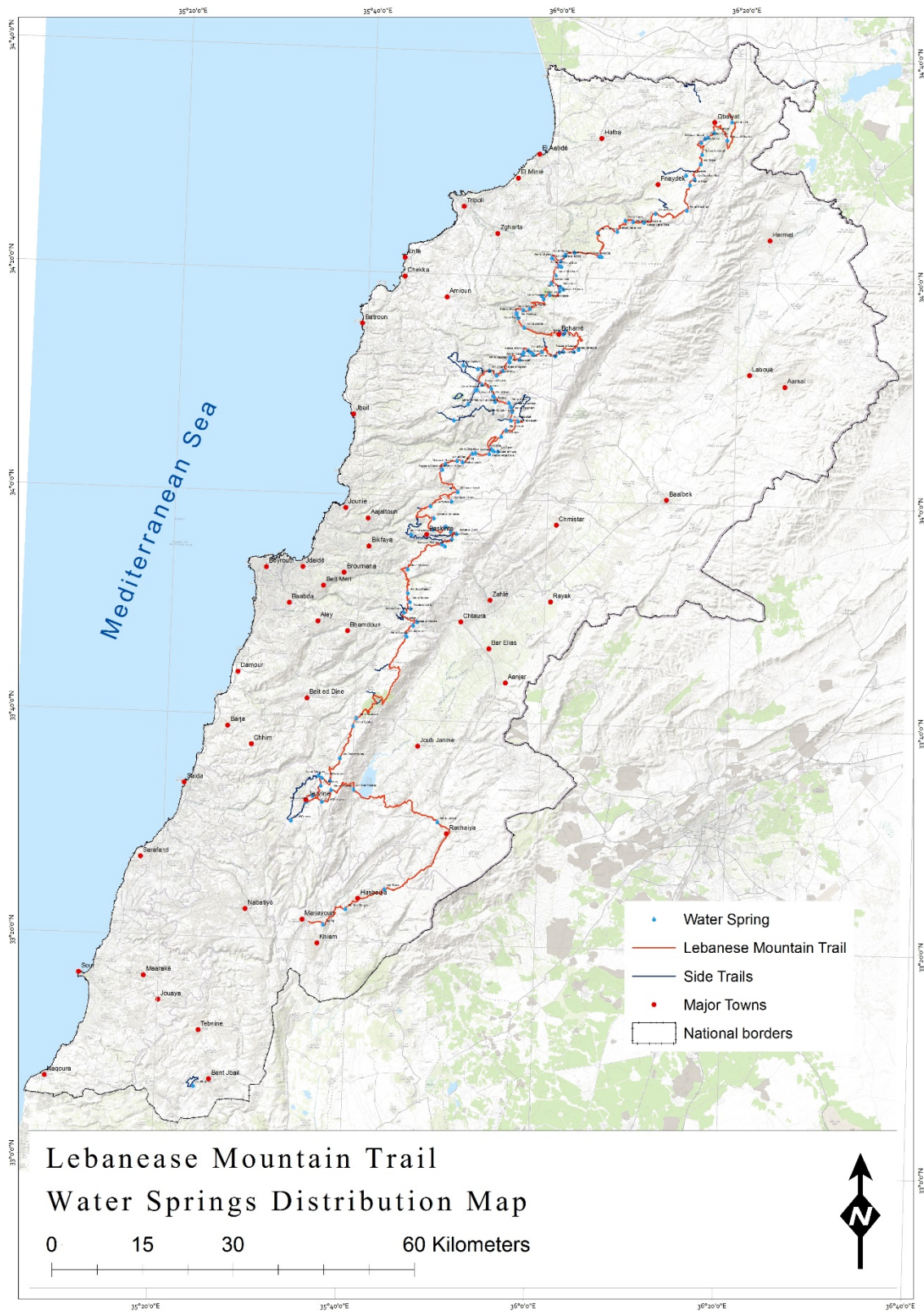
Annex 2: Erosion map



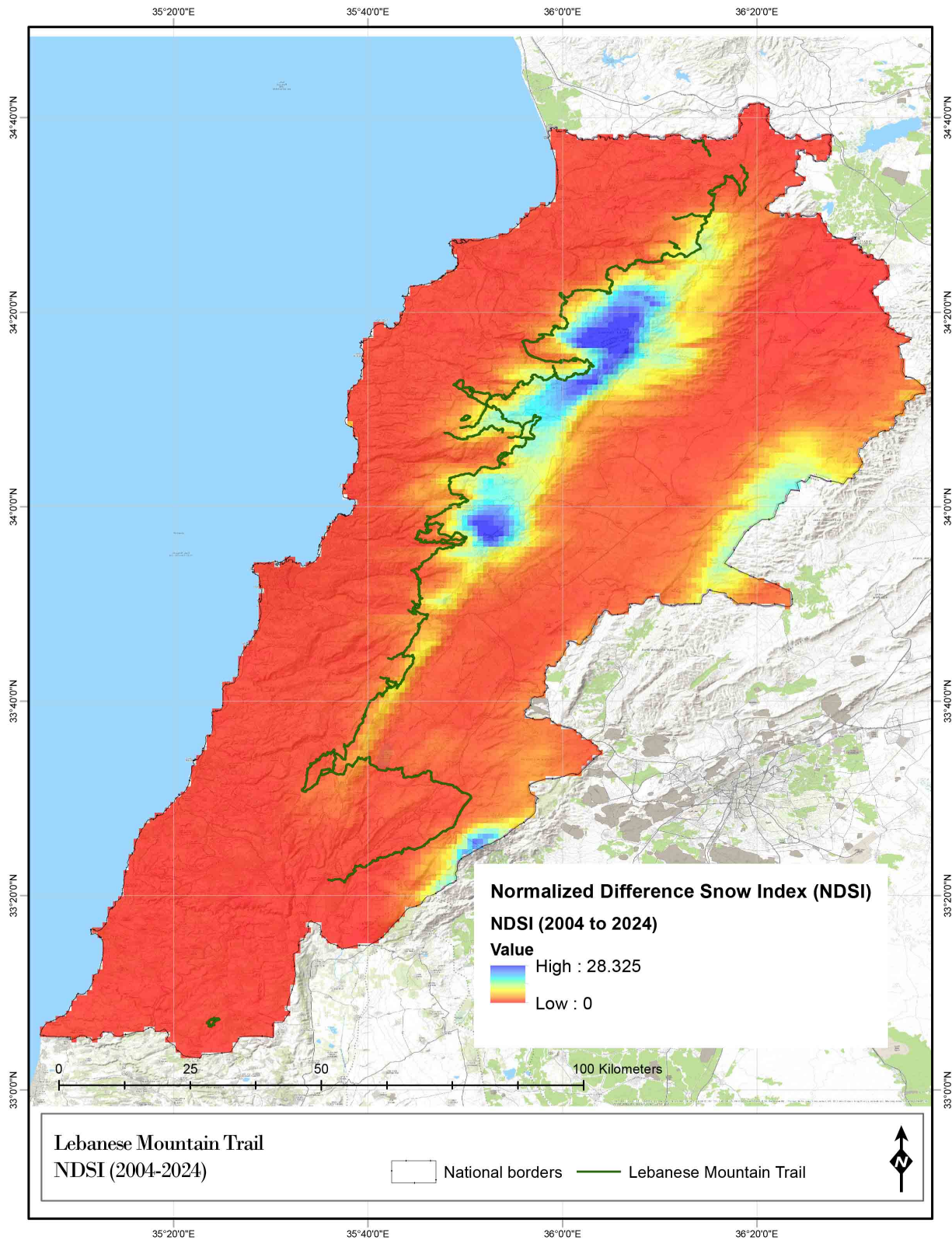
Annex 3: Mass movement map



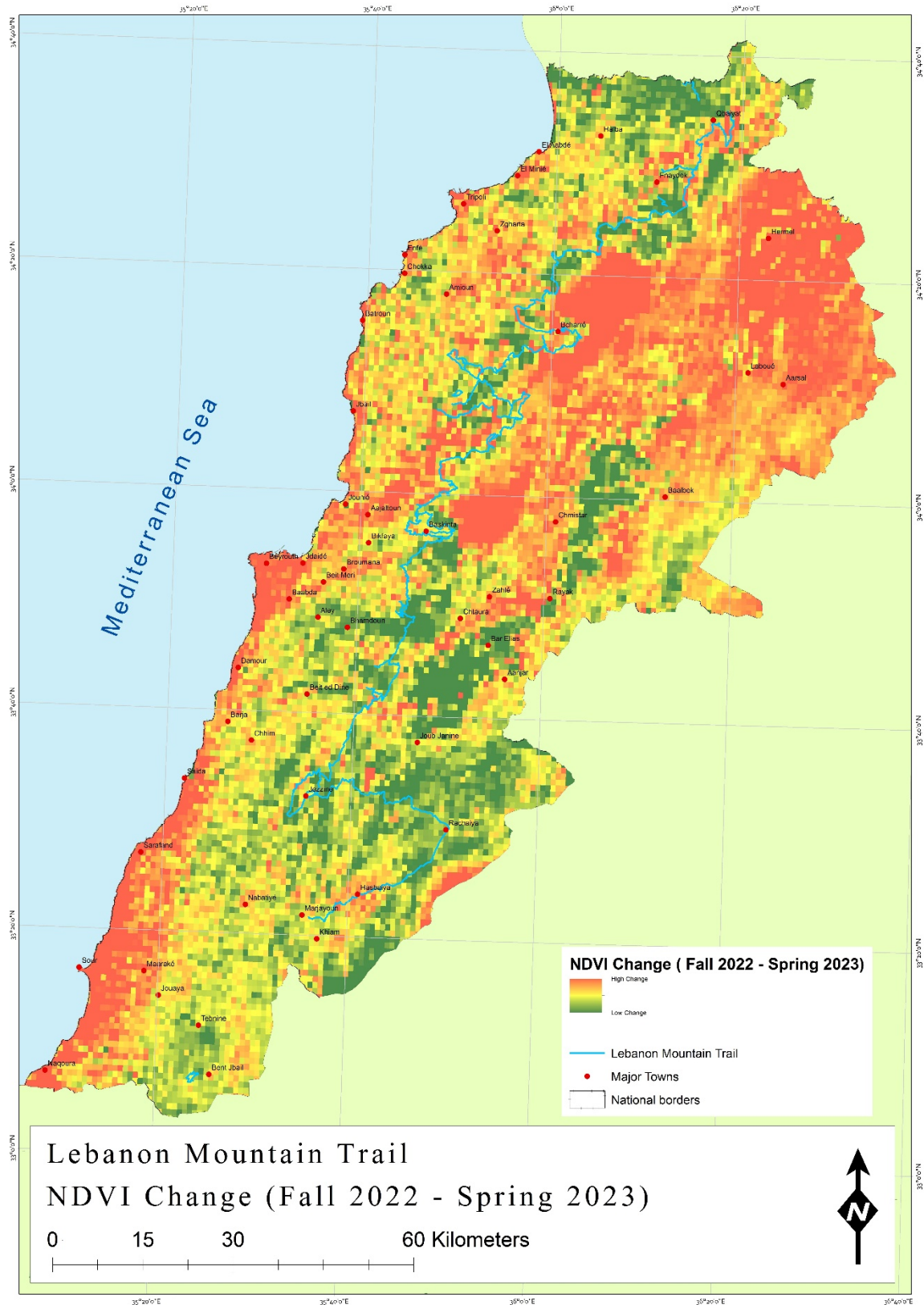
Annex 4: Streams and trail intersections



Annex 5: Water springs along the LMT



Annex 6: NDSI map



Annex 7: NDVI seasonal change