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# Landscape Approach to Bio-Cultural Diversity Conservation in Rural Lebanon

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## 1. Introduction

Traditional rural landscapes in Lebanon as elsewhere in the eastern Mediterranean are as much a product of geographical setting and natural processes as they are of cultural modification and adaptations over time. A rich and diverse mosaic of woodland patches, degraded maquis scrubland, terraced perennial cropping of olives trees and vineyards, the rural landscape is characteristically a combination of 'natural' and 'cultural' ecosystems. Traditional rural landscapes combine agricultural, silvicultural and pastoral uses within an integrated management system. Multifunctional in use, sustainable environmentally, valued culturally, traditional rural landscapes are well adapted to poor the degraded environmental conditions in marginal terrain which are suitable for little else (Makhzoumi, 1997). Nevertheless, assessment and valuation and similarly development strategies fail to recognize their specificity. Attempts by the state in the 1950s to 'modernize' agriculture for the most part focused on monoculture farming and cash crops through blanket agricultural policies that do not recognize the value of traditional production systems and vernacular management practices. Nature conservation strategies have similarly sidestepped traditional rural landscapes. National strategies for nature conservation since the 1990s have prioritized on the protection of 'native' species, cedar forests and natural ecosystems, disregarding the potential of traditional rural landscapes as wildlife habitats, a repository of Lebanon's exceptional biodiversity. Research and development of rural regions are similarly narrow in approach, divided between the focus of scientists and engineers on environmental problems and that of social scientists on social and economic betterment. State management and administration replicates the disciplinary divide in national policies because ministries prioritize on one or another component of rural landscapes, for example agricultural production, environment, socio-economic betterment, with little coordination in planning and management. In combination, fragmentary planning and management fail to address the specificity of marginal rural settings as a unique *mélange*, part nature and part culture, tangible physicality and intangible socio-cultural.

Failure in planning and management are further aggravated by political marginalization that has left rural communities in Lebanon in need of social and economic development. Civil war (1975-1990), Israeli occupation in south Lebanon (1978-2000) and the war in July 2006 in turn depopulated much of the countryside, disrupted traditional rural lifestyles and undermined traditional rural economies. Forestlands were reduced from twenty percent of

the land area in 1975 to 5 percent by the late 1990s. Degradation of traditional stone terraces that constitute the backbone of agriculture in marginal lands, the consequent soil erosion as well as destruction of Mediterranean rangeland constitutes a quarter of the total cost of environmental and natural resource destruction estimated by the World Bank at US\$ 315 million in 1996 (Hamdan, 2002, p. 185).

Failure to appreciate the specificity of Mediterranean rural landscapes is not limited to Lebanon. Naveh (2008) critiques the 'ingrained tendency to fragmentize and take apart what is in reality whole and one' and in part the result of the rift between the 'biocentric' approach of scientists that focus on nature, ecosystem and environment and the 'anthropocentric' approach of social scientists, cultural and humanistic geography. The outcome has been a compartmentalized approach to rural development, a focus on 'nature' and the 'natural' or 'culture' and the 'cultural'. The imposition of north European planning to Mediterranean rural landscapes is equally to blame for these failures. Blanket policies for intensive agriculture production in marginal Lebanon, mirrors the EU Common Agricultural Policy (CAP). The damage caused by CAP is the outcome of CAP's inability to recognize the ecological and socio-economic conditions that prevail in fragile mountain landscapes in the Mediterranean that can only support traditional terraced cultivation (Naveh, 2008). Dismissive of the diversity and multifunctionality of traditional landscapes, large-scale intensive monocultures in marginal terrain eventually fail. In the process they destroy the sustainable traditional rural systems they came to replace and just as critically, they destroy the traditional practices and the values that are attached to them.

This chapter proposes a landscape approach to planning and management in rural marginal Lebanon. We shall argue that a landscape approach produces key advantages by integrating environmental, ecological and cultural values of marginal landscapes and as such addresses rural needs for health, decent living while protecting bio-cultural heritage. A community woodland project in Ebel-es-Saqi village in south Lebanon serves as a case study to demonstrate the landscape design approach. The underlying aim is to broaden the scope of landscape architecture, an emerging profession in Lebanon, beyond prevailing perception of the profession that is limited to urban environments and contemporary settings.

The chapter is divided into five sections. In the first, we shall define 'landscape' in the context of sustainable rural development in traditional marginal Mediterranean settings. The next section sets the background to the case study, Ebel-es-Saqi village, and the methodological framework of ecological landscape design. In sections three and four the methodological framework is applied to secure an expansive landscape reading of landscape Ebel-es-Saqi village and to write narratives for future development. In part four we review offshoot community initiatives that evolved from the landscape master plan. The paper concludes by revisiting the claims made in favor of a landscape design approach to protect bio-cultural diversity in rural marginal landscapes in Lebanon.

## **2. The landscape approach**

Landscapes are the byproduct of human adaptations of natural settings for the purpose of securing shelter, food and/or for pleasure. 'Landscape' therefore implies tangible physicality (field, orchard, settlement, or region), the product, but also perceptions and cultural valuations attached to this physical setting in the act of production. By pairing

'product' and 'production', environment and people, landscape acquires a discursive elasticity that has encouraged use of the term by several disciplines, each focusing on one or another of the multiple meanings of the term (Makhzoumi, 2002). Scientists, for example, are concerned with the physicality of landscape which they use interchangeably with environment and ecosystem. Landscape ecologists, apply a holistic view of landscape as a "living system" composed of natural and managed components that evolve over time and that are contiguous in space from smallest mappable ecotone to the global ecosphere (Naveh and Lieberman, 1990). Social scientists on the other hand see landscape as a medium for interpreting traditions, constructing identities and unfolding cultural heritage. The 'humanized' conception of cultural geography, for example, has evolved from earlier objective ways of 'knowing about' landscapes and places, their material and tangible facts and features, towards deeper, 'empathetic ways' of understanding meanings, symbolic qualities and values imbedded in the socio-spatial dialectic (Adams et al., 2001). Landscape architects bridge the disciplinary spheres. They draw on the *instrumental* framework of scientists, the *interpretive* approach of social sciences which they combine with creative, lateral design thinking as they aspire to create places of significance and meaning. A landscape design reading therefore is integrative of the past while addressing futures, responsive to locale with awareness of larger spatial contiguities, sensitive and inclusive of shared cultural meanings and values (Figure 1).



Fig. 1. Schematic representation of the 'landscape' as the product of people-environment interaction, expansive spatially and temporally (source: Makhzoumi, 2010)

In this study, we shall argue that the expansive framework of landscape design offers several advantages when applied to traditional Mediterranean rural landscapes. First, breeching the natural and cultural sciences, approach and method in landscape architecture are integrative of the totality of the rural landscapes, 'natural' and 'cultural'. Landscape narratives for development as such address nature and biodiversity conservation just as they recognize the value of traditional rural landscapes as cultural heritage (Makhzoumi, 2012). Spatial in

essence, the expansive integrative framework of landscape is successfully adopted in planning for nature conservation as well as serving as a medium for identity construction and heritage. The emerging discourse on the protection of cultural landscapes is increasingly being adopted as a framework for reaffirming local and/or regional identity and heritage. For example, the Council of Europe 2000 declaration states that “landscape contributes to the formation of local culture and it is a basic component of the European natural and cultural heritage, contributing to human well being and consolidation of the European” ([http://www.coe.int/t/dg4/cultureheritage/Conventions/Landscape/default\\_en.asp](http://www.coe.int/t/dg4/cultureheritage/Conventions/Landscape/default_en.asp)).

A second advantage lies in the contextualized narrative proposed by landscape design. Responsive to place and inclusive of local community needs and aspirations while aiming for economic and social betterment, a landscape design approach is therefore bottom-up rather than generic and top-heavy. Landscape design and planning is likely to counter indiscriminate application of imported development and conservation policies that disregard the specificities of Mediterranean contexts, whether ecological or cultural (Makhzoumi and Pungetti, 1999; 2008). The integrative and interdisciplinary approach of landscape design is more likely to foster multifunctional scenarios for development. Applied to traditional rural landscapes, an interdisciplinary landscape design approach can lead to sound planning strategies.

### 3. The Ebel-es-Saqi case study

Ebel-es-Saqi is a village of 3,448 inhabitants, 70 km drive from the coastal city of Sidon. The village woodland was totally destroyed in the last decades of Ottoman rule (circa 1900). In the 1960s-1970s, the Ministry of Agriculture undertook a campaign to reforest degraded village woodlands<sup>1</sup>. Ebel-es-Saqi was one such village, its common land (Arabic himas), reforested with pine, cypress and eucalyptus trees. Budgetary limitations accounts for the selection of inferior, fast growing species rather than oak, hawthorn and cedar trees that were native to the region and that composed the original Ebel-es-Saqi woodland. Only the gentle slopes of the north-eastern aspect were reforested (12.6 hectares, one third the total area of Ebel-es-Saqi common land). The rocky, south-eastern slopes were difficult to plant and remained bare. More significantly, authority over the newly reforested woodland was removed from the village to the Ministry of Agriculture, albeit temporarily pending establishment of the woodland. The enforcement of top-heavy forestry protection laws prohibited the village community from use and management. Having lost stewardship, the local community eventually lost interest altogether in woodland.

Ebel-es-Saqi woodland project was one of several post-occupation recovery initiatives in south Lebanon following Israeli withdrawal in 2000. The woodland had survived the ravages of war through protection of the United Nations International Force in Lebanon (UNIFIL) that established its headquarters in the village. Meanwhile, the mixed pine and cypress trees, 30+ years old, had become an impressive landscape in a region that through war and occupation had lost most of its woodlands (Figure 2). UNIFIL alerted United Nations Economic and Social Commission in West Asia (UN-ESCWA) to the beauty of Ebel-

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<sup>1</sup>Woodlands were re-established in sixty six villages covering the four regional governorates: 10 villages in Mount Lebanon; 21 villages in the Bekaa; 21 villages in the North; and 20 villages in the South (Personal communication with Mr Fadi Asmar, Ministry of Agriculture).



es-Saqi woodland urging its protection. The challenge of linking woodland protection and community betterment was not clear. This chapter's lead author was consulted on possible approaches and asked to define a project scope and objectives and was thereafter commissioned with the preparation of a landscape master plan. Commissioning a landscape architect was itself significant, since perception of the profession in Lebanon is more readily associated with urban commercial settings than with rural development. The latter was due to the fact that Ebel-es-Saqi woodland landscape was too small and humanized to be valued as 'nature' and too 'natural', to be commissioned to an architect.



Fig. 2. Ebel-es-Saqi village woodland is a landmark in a forestless landscape.

The challenge facing the landscape design was how to integrate physical and human recovery and in addition how to integrate environmental and socio-economic developmental objectives. Initial visits to the site and early negotiations with UN-ESCWA confirmed that a landscape approach and methodology would be adopted to define the project objectives. These were threefold: to protect the village woodland as a wildlife habitat; benefit local community economically from the woodland; and promote local awareness of environment and natural resources (Makhzoumi, 2003).

The methodological framework of ecological landscape design (Makhzoumi, 2000; Makhzoumi and Pungetti, 1999) was applied to secure a holistic reading of woodland and village landscape and similarly to write expansive narratives for community-inclusive protection. The interdisciplinary framework of ecological landscape design affected

assembly of the project team, which included faculty and students from the American University of Beirut. The team included a conservation biologist, ecosystem scientist, ecologist, GIS expert, agriculturalist, architect and a landscape architect.<sup>2</sup> Comprehensive surveys were undertaken of the woodland and village landscape, which included geomorphology and land cover, on-site surveys of woodland flora and fauna, photographic documentation of views and vistas from within the woodland, interviews and focus groups with the local community. The research extended to include an archival search of historic village maps from the French Mandate (circa 1930s), which were instrumental in recalling Arabic vernacular placenames that had been transcribed for the entire village on the archival map. One such name was 'hima', referring to the Ebel-es-Saqi common land. Ironically, Arabic placenames do not appear on more recent cadastral maps in Lebanon. The findings of the interdisciplinary survey are herein presented, the layers woven into a landscape reading of place and people (Makhzoumi, 2003).

#### 4. Reading Ebel-es-Saqi landscape

Ebel-es-Saqi village's location and landscape features are typical of Lebanese mountain terrain (Freyha, 1957; Murr, 1987). The village's origin is biblical having been established in the proximity of the spring of Ebel from which the village derives its name (Arabic, 'Ebel of waters')(Feghali, 2002). The village straddles one of two hilly peaks, 684 meters above sea level (m.a.s.l.), enabling defense and a commanding view of the surroundings. The hillside southeast of the village is terraced and cultivated with olive trees all the way to the Hasbany River Valley. Village woodland occupies the northeastern aspect of the second hill at 700 m.a.s.l. The geology at Ebel-es-Saqi is predominantly of sedimentary and calcareous rocks with minor sandstone and basalt formations. Red soils dominate 70% of the village cadastral area with discontinuous grey soils that form the substrata beneath the Hasbani River southeast of the village. Village cadastral area is 750 ha of which 44% constitutes the hima, 34% olive tree cropping, 14% arable land and 8% built-up settlement area (Figure 3). The hima is predominantly of grassland and degraded garigue with advanced maquis scrubland along the Hasbany River verges. Ebel-es-Saqi woodland, the forested part of the village common land, constitutes a mere 5% but has a considerable visual impact. Olive tree cropping is on private land (Figure 4). Specimen olive trees were estimated at several hundred years, claimed by the local community as their Roman heritage. Each household possesses an olive orchard as olives are central to the local diet and often the only means of livelihood. Declining marketability invariably undermines profitability and affects the value of the traditional rural landscapes. Field crops, mainly wheat and barley, traditionally grown on gentle slopes to the northwest of the village are in decline. Built-up settled area is compact, consisting of traditional stone houses with pitched, terracotta roofs. Residents returning to the village after 2000 have restored the traditional village houses but also favor 'contemporary' building styles and materials.

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<sup>2</sup>The Master Plan Team consisted of conservation biology, Salma Talhouk, ecosystem and environmental resource management, Rami Zurayk, GIS expert, Dani Leshia, ecologist, Riadh Sadek, agriculturist, Khaled Sleem, graduate students Ranya Nasrallah and Rhea Selwan, junior architect, Fatima Qaissi and the project leader, architect and landscape architect, Jala Makhzoumi.

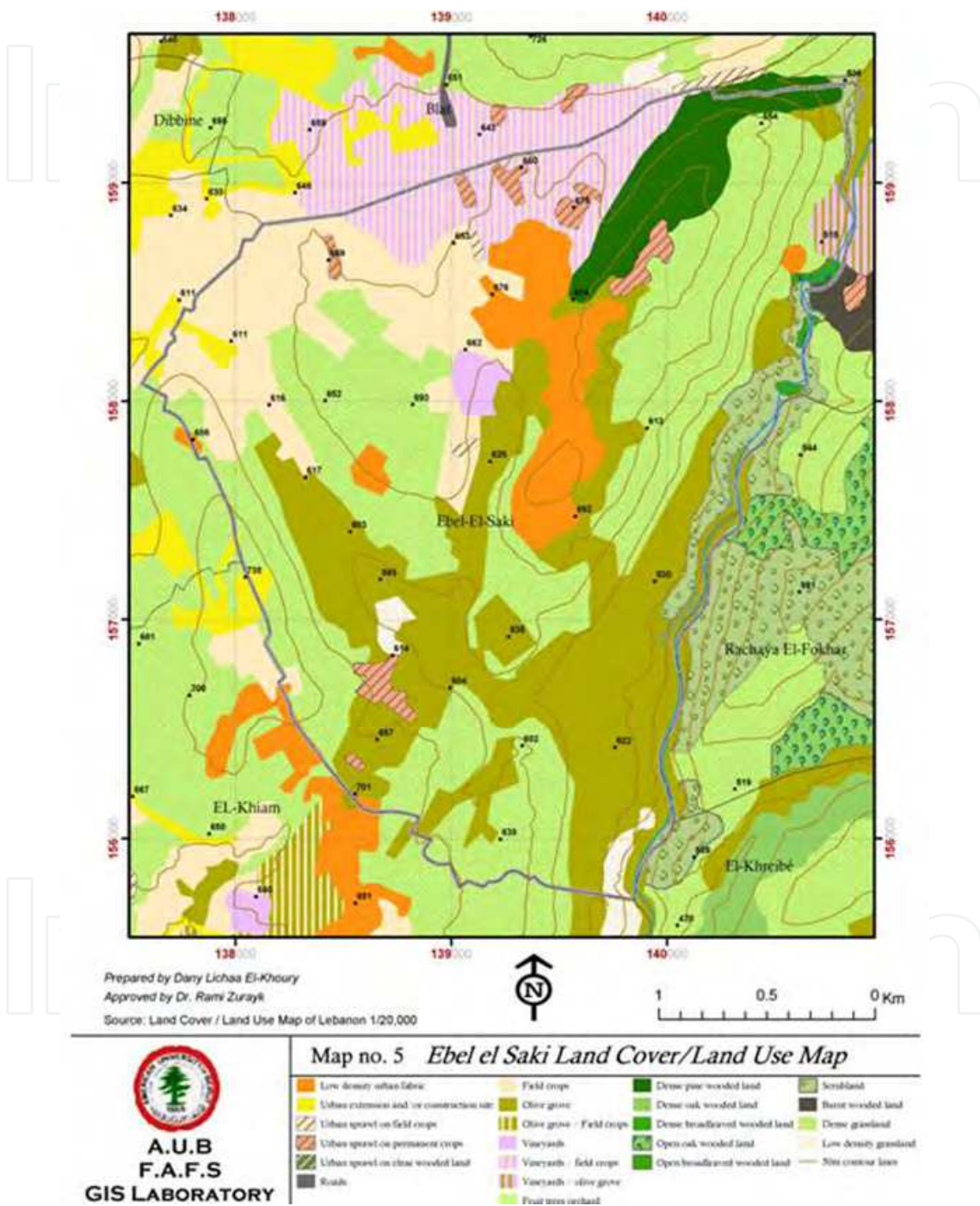


Fig. 3. Land cover, Land use map for Ebel-es-Saqi (Makhzoumi, 2003)





Fig. 4. Olive cropping southeast of the village extends all the way to the Hasbany River Valley.

Literature on floral diversity in Ebel-es-Saqi and the surrounding region reflect the potential of traditional rural landscapes as wildlife habitat for Lebanon's exceptionally high biodiversity (Ministry of Agriculture and UNEP, 1996). Earlier floral surveys for Ebel-es-Saqi, Marjayyoun, Hasbani River and Hasbaya by Paul Mouterde (1965) list a wide variety of floral species. Many species and varieties were specific to Ebel Esaqi, for example *Calendula palaestina*, *Centaurea crocodylium*, and *Scabiosa palaestina* var. *palaestina*. On-site collection and identification of the plant species extended over three full days in November 2002. A total of 41 plant species were collected and 38 identified. Thirty of the plants collected were perennial, the remaining annuals, bulbs, crocuses and succulents. Five tree species were identified in the woodland: three species of pines, *Pinus brutia*, *Pinus halepensis* and *Pinus pinea*; one species of oak and a gum tree, *Eucalyptus* spp. The tree density within the woodland varied considerably from 37 trees/1000m<sup>2</sup> to 64 trees/1000m<sup>2</sup>. Faunal diversity, based on site visits but also from observation of what could be inferred with some certainty from surveys in the region, include smaller mammals, mole rats, *Spalax leucodon ehrenbergi*, field voles, *Microtus guentheri*, tortoise *Testudo graeca* and two types of lizards, *Lacerta laevis* and the hardun *Laudakia stellio* and one snake species, the Montpellier snake, *Malpolon monspessulanus*. By far the most abundant wildlife is avifaunal. One eagle was observed on site, more in the surrounding areas. Ebel-es-Saqi residents are avid hunters. They spoke of the diversity of birds that visit the forest throughout the year.

Beyond village woodland, ecological significance as indeed landscape character lies in the entire village landscape, the treeless *hima*, open scrubland descending to the Hasbani River, abandoned terraces and those managed, cultivated with olives. The responsiveness of each

landscape component to physical setting ensures that the whole, the rural landscape mosaic, is sustainable environmentally, while landscape heterogeneity and connectivity provide a diverse and continuous wildlife habitat.

Earlier in this paper we argued that the concept of 'landscape' includes not only tangible physicality but equally intangible, socio-cultural perceptions and valuation of the physical. A cultural reading of Ebel-es-Saqi landscape was secured to complement the reading of physical landscape. A diversity of methods was adopted to secure a cultural reading of Ebel-es-Saqi and establish in-depth understanding of local community expectations of the woodland and the village landscape. Initial interviews with the local community members and focus groups (Makhzoumi, 2003), revealed puzzlement as to why the woodland was favored. Local community members argued that the investment should have targeted olive agriculture that was of far greater benefit to village. The community repeatedly referred to the status of Ebel-es-Saqi as a model Lebanese village in the 1960s. The bait al fallah (Arabic, 'house of the farmer'), a folklore museum for traditional agricultural implements, was repeatedly mentioned as proof of the village's elevated status before its destruction during the civil war (1975-1990).

Nevertheless, the village community was grateful that their woodland was now the source of international attention with funding allocated for its development.

A survey of aesthetic preferences in Ebel-es-Saqi confirms the findings of earlier interviews (Selwan, 2004). The survey indicates that olive agriculture, the main source of livelihood, came in second place in terms of landscape aesthetic preference, while the village landscape's distinctiveness and local identity, more readily associated with the Ebel Spring, came in first place<sup>3</sup>. The choice is understandable considering that water is the key to agriculture in a semiarid region but more obviously because of the origin of the village's name. More significantly, the treeless part of the hima, the rocky outcrops, ranked ahead of the woodland itself, which reflects local valuation of wildlife resources that are abundant in degraded scrubland and constitute an important part of the local important part of the local diet. The accumulated scores assigned to each landscape component indicate that traditional communities distinguish between aesthetic preference of landscapes, for example Ebel Spring and village woodland, and valuation of landscape in terms of usefulness, for example olive agriculture and open scrubland (ibid). Regardless of age, affiliation or education, the people of Ebel-es-Saqi value all components of the village landscape including traditional management routines, social practices of harvesting wild plants and hunting and agriculture related festivities such as olive harvesting. The analysis of semi-structured interviews reveals that far from a passive container, the discourse emerging from Ebel-es-Saqi reflects landscape as an enabling medium through which local identities are defined and redefined, in response to socio-economic and political influences, both local and regional (Makhzoumi, 2009; 2004). Perceptions of village identity too were changing. Older inhabitants and farmers associated identity with agriculture (particularly of olives), arguing

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<sup>3</sup>Selwan uses photographs of key landscape features in Ebel-es-Saqi (Ebel Spring, olive groves, agricultural fields, rocky outcrop of the Hima and woodland), asking respondents to rank photographs according to their aesthetic preference with a ranking scale from 1 to 5. Background characteristics of respondents (gender, age, level of education, income and employment in agriculture) and 'fringe' questions on biodiversity evaluation were also included.

that value and beauty reside in landscape usefulness. Young community members on the other hand associated village identity and distinctiveness with the woodland, reflecting greater awareness of environment and nature conservation (ibid) (Table 1). The totalizing, holistic local perception of the village landscape, experiential rather than strictly visual, inclusive of past while looking to the future, was as important in shaping the landscape master plan as the team's reading of the physical setting.

<b>Traditional Conceptions</b>	<b>Emerging Conceptions</b>
Agriculture related (village olive orchards)	Environment related (village woodland)
Valuation associated with agricultural productivity and usefulness (agricultural, woodland and pastoral livelihoods)	Valuation associated with nature and environment (biodiversity conservation and nature tourism related livelihoods)
Predominantly interviewees age <30-35	Predominantly interviewees age >30
Olive orchards and Ebel spring prominent in the discourse on identity/heritage	Village woodland and war memorial gardens dominate the discourse on identity/heritage
Inherited landscape values passed on within family, extended family and village community	Landscape values influenced by global trends, international projects and environmental education at schools

Table 1. The conception of landscape, place, identity and heritage in post-Israeli occupation Ebel-es-Saqi Village evolves in response to economic, political and environmental influences (source: Makhzoumi, 2009).

## 5. Writing Ebel-es-Saqi landscape

The holistic reading of Ebel-es-Saqi secured by the project team broadened the aim of the landscape master plan spatially beyond the woodland to embrace the entire *hima* and programmatically to address cultural preferences, intangible community needs and the valued rural heritage. The first step towards developing the landscape master plan was to re-aggregate the deconstructed, layered reading into Ecological Landscape Associations (ELAs), broad landscape character zones that are at once a framework for conceptualizing landscape and an operational tool for writing futures narratives (Makhzoumi, 2000). Based on geomorphology, vegetation cover, traditional uses and management, three broad ecological landscape character zones were identified for (Figure 5): Zone I: Pine Woodland is visually dominant, but poor ecologically because no native tree species were included in reforestation. Replacement with native oak species and associated shrubs recommended were seen as a means to reclaim the natural heritage that survives in village domestic gardens and in the collective memory of the local community; Zone II: Rocky Outcrop, the open landscape and rugged terrain of this zone makes it the richest in terms of species diversity. With the exception of dwarfed, remnant oak trees, the landscape is rich in flowering bulbs and annuals (Figure 6). The master plan calls for recognition and protection of this zone and for reduced public access to encourage biodiversity responsive uses, for example honeybee-keeping that the Ebel-es-Saqi is well known for; Zone III: The Hasbani Valley Ecotone is significant ecologically as the meeting of two ecosystems, open scrubland of the Hima and the Hasbani riparian ecosystem. It is of ecological value because the river corridor links the hima with the outlying landscape.



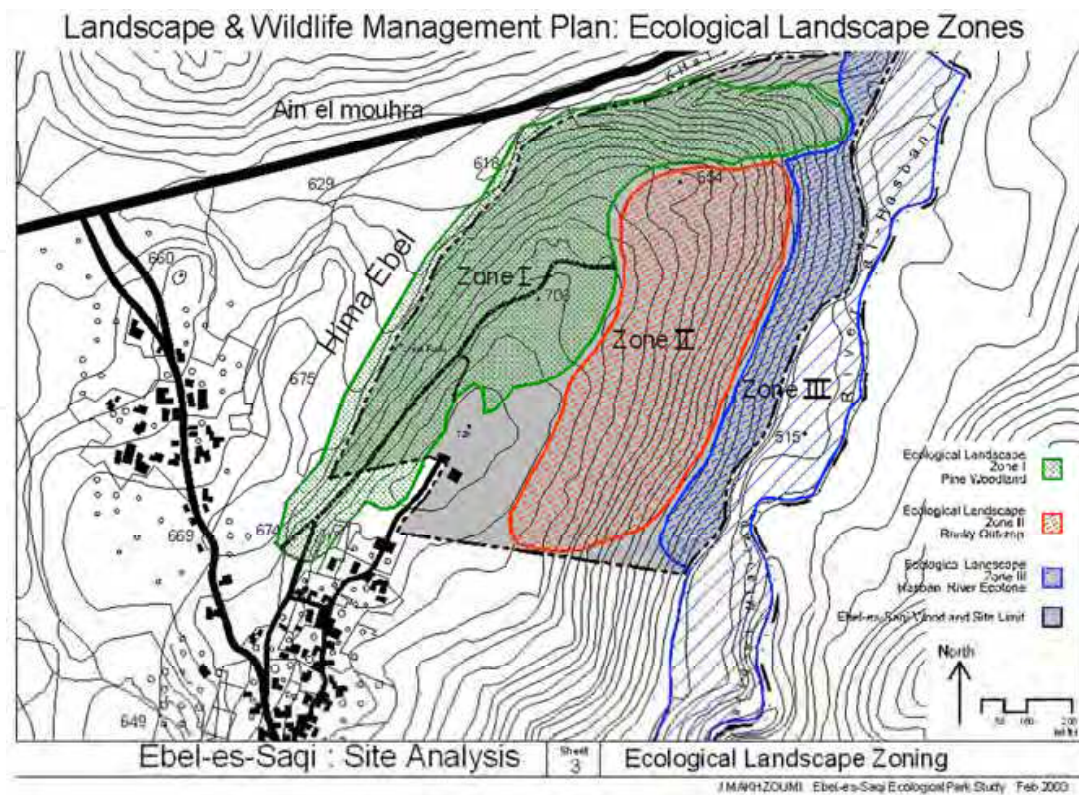


Fig. 5. Ecological landscape character zones were identified for the hima Ebel-es-Saqi (Makhzoumi, 2003).



Fig. 6. Zone II: Rocky Outcrop, an open landscape, rugged terrain rich in floral diversity.



These three zones provide a sound basis for conservation and sustainable management while constituting the building blocks for the landscape master plan concept (Figure 7). In parallel the concept of ‘multifunctional landscapes’ was adopted in developing the landscape master plan. Traditional Mediterranean rural landscapes are multifunctional, integrating multiple uses on the same land area thus ensuring efficient and sustainable use of land, natural and human resources. As a contemporary concept in landscape planning (Brandt and Vejre, 2004; Tress et al, 2001), multifunctional landscapes ensure the integration of a project’s multiple objectives in two ways. The first conceptualizes the woodland as a venue for alternative livelihoods from nature-related tourism and equally as a place to promote rural culture. The master plan proposes the ‘Ebel Market’ at the entrance of the ecological park to promote the village’s historic and traditional rural heritage and to market local produce such as olives, honey and dried mountain herbs. The second strategy provides for flexible recreational and community activities for the local community and the surrounding villages that include informal spaces, panoramic outlooks, promenades and sport courts. The diversity of formal and informal spaces aims to re-engage the local community with the protected site as well as generating interest in environment and nature conservation. Also a proposed ‘Science Centre’ with a small lecture hall and references on biodiversity would serve as the focus for environmental awareness for schools, local communities of the surrounding villages and beyond (Figure 8).

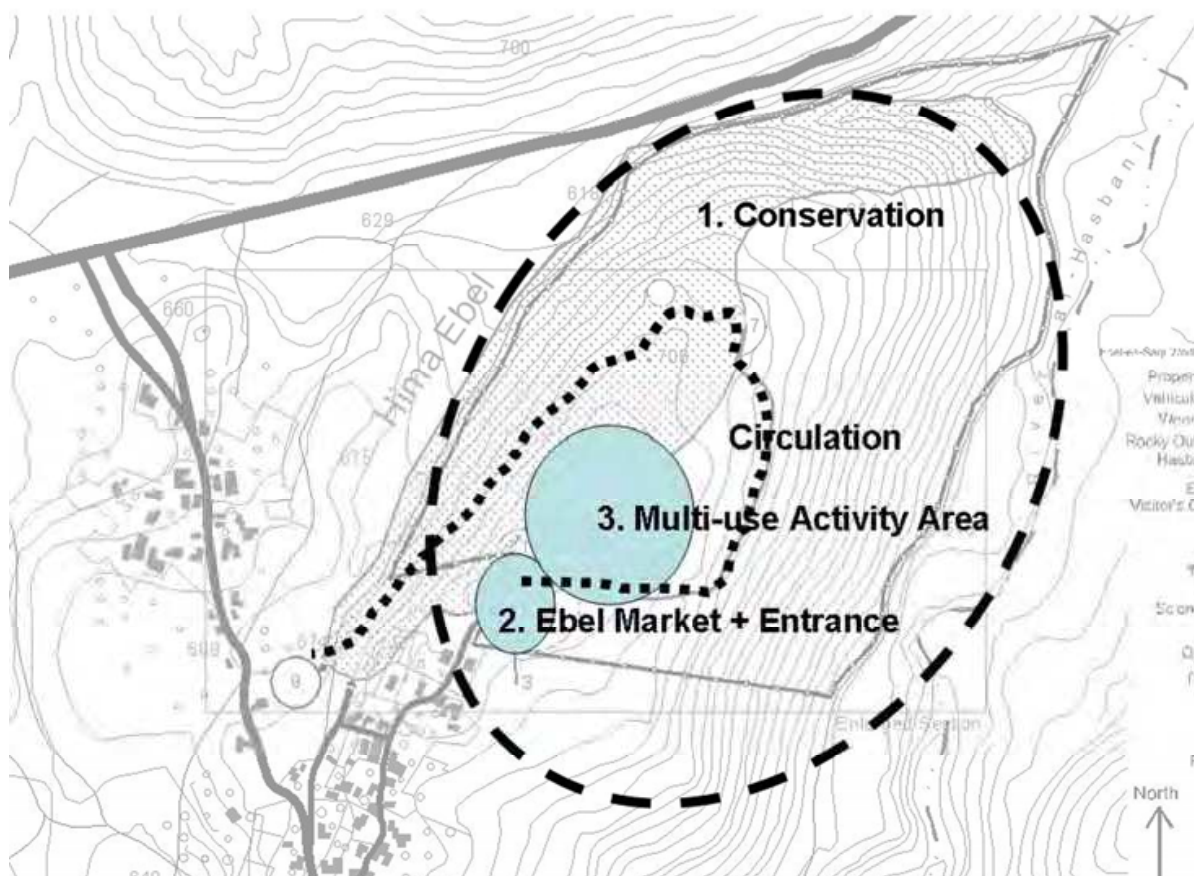


Fig. 7. Schematic concept for the Ebel-es-Saqi woodland landscape master plan (Makhzoumi, 2003)

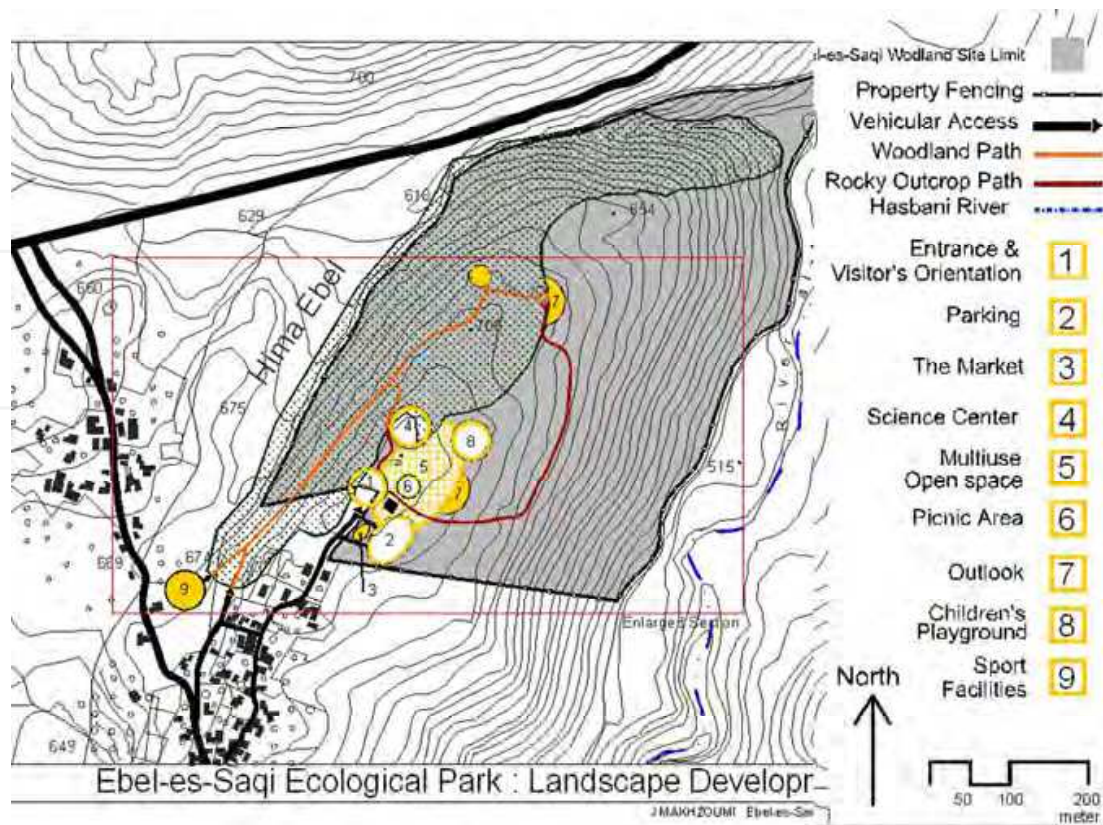


Fig. 8. The Ebel-es-Saqi woodland landscape master plan (Makhzoumi, 2003)

To summarize, the far from completed landscape master plan provides a flexible framework that recognizes the village's history and combines it with its present needs while promoting awareness of the environment and natural resources. The efficacy of the master plan as a sound basis for conservation and development and as an enabling framework for local community enjoyment and action was demonstrated in the years that followed<sup>4</sup>.

## 6. Ebel-es-Saqi woodland landscape master plan: Offshoot initiative

### 6.1 Reclaiming the Hima

The community- and culture-inclusive approach of landscape promoted dialogue between the design team and the village inhabitants and renewed local interest in the woodland, i.e. as a potential for economic development, and reaffirmed local pride in their village heritage. And although few in the village comprehended the technical specificities of the landscape design, the master plan was nevertheless instrumental in empowering and mobilizing them to seek funding for further development. The first line of action was to reclaim authority over the hima, which was a key for the success of the project for two reasons. First, from its inception the project was community inclusive, seeing the project as a means rather than an end.

<sup>4</sup>The landscape master plan was completed in 2003. An international campaign was made by UN-ESCWA to introduce the Ebel-es-Saqi project together with three other projects it had initiated to secure funding for implementation. The Ebel-es-Saqi woodland was selected by Mercy Corps (<http://www.mercycorps.org/>), which was already funding other projects in south Lebanon. Thereafter, Mercy Corps secured funding for implementation of the master plan.

Protecting the woodland was to support local community claims to stewardship of the woodland. Second, international funding for implementation had as a prerequisite local community ownership. International agencies are increasingly hesitant to fund projects through the state and/or the ministries.

Towards this aim, the project team with representatives from Ebel-es-Saqi municipality with the support of UN-ESCWA approached the Ministry of Agriculture to discuss legislative and procedural steps to reinstate local authority of the hima. Negotiations were settled in favor of the village with completion of the master plan in the spring of 2003. An official decree by the Ministry of Agriculture conceded that authority of the woodland reverts to the village. Encouraged by their success, the village community looked to reclaim its cultural heritage, and to negotiate with Mercy Corps the prospects of reviving the bait al fallah.

## 6.2 Recognizing the village rural heritage

*Bait al Fallah* was a folkloric museum that represented historic rural lifestyle and had been the pride of the Ebel-es-Saqi village. The museum was housed in one of the village stone houses, itself an example of vernacular building traditions, and exhibited a collection of traditional agricultural implements. The Bait al Fallah must have been significant architecturally for it to be included in Friedrich Ragette's (1980) survey of rural architecture in Lebanon before its destruction during the civil war (Figure 9). Although Ebel-es-Saqi's status as a model village and the museum are not apparently linked, both figured prominently in interviews with the community, as if destruction of the museum put an end to the elevated village status. The Bait al Fallah was as such an important part of village shared identity and rural heritage.

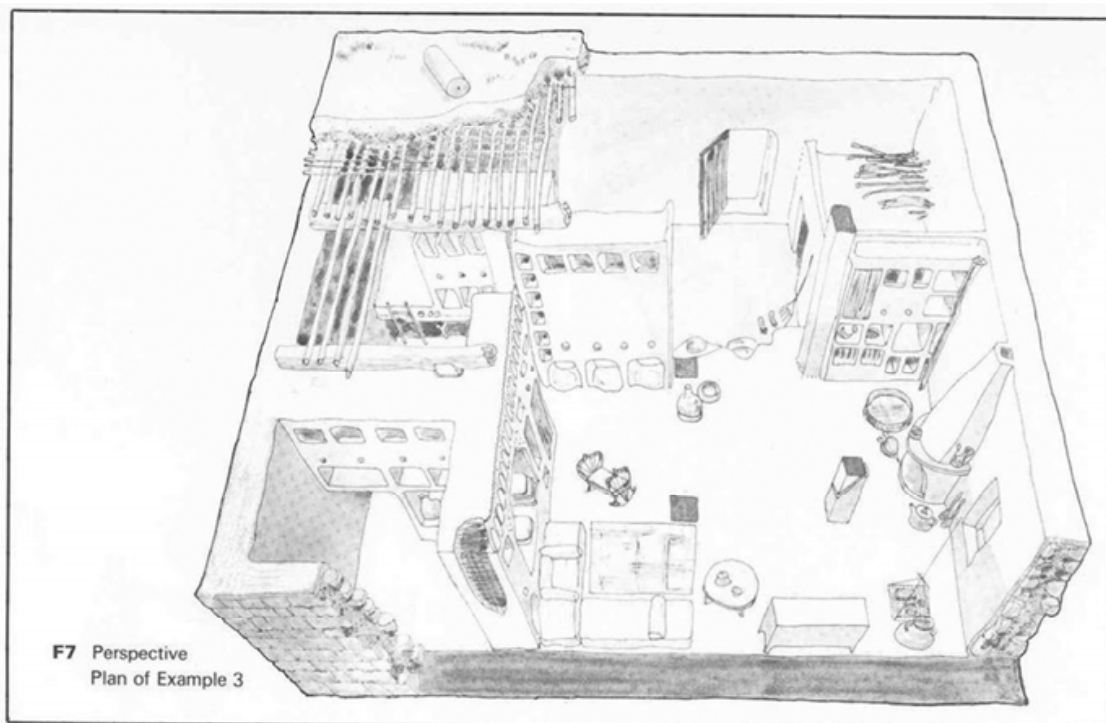


Fig. 9. Three dimensional construction of the *Bait Al Fallah*, folkloric museum of Ebel-es-Saqi as surveyed by Frederic Ragette (1980)



In 2005 Mercy Corps agreed to fund reconstruction of the *Bait al Fallah* folkloric museum. As heritage architecture, the Ebel Market proposed by the master plan was the appropriate site for relocation. A local architecture firm was commissioned to prepare the plans and implementation details based on Ragette's drawings<sup>5</sup>. Rebuilt, the Bait al Fallah is today a prominent showpiece for the local community, one of the few folkloric museums that embody Lebanon's traditional Mediterranean rural culture (Figure 10).



Fig. 10. View of the Bait Al Fallah (foreground), the Visitor Centre (background) and the upper edge of the woodland (left)

### 6.3 Broadening the agenda for biodiversity

The ecological basis for developing the landscape design and the expansive reading of the village landscape were instrumental in reconfiguring the nature conservation agenda to include the diversity of the rural mosaic, the entire landscape of Ebel-es-Saqi. Having secured funding for implementation of the Ebel-es-Saqi landscape master plan, Mercy Corps in turn commissioned the project to the Society for the Protection of Nature in Lebanon (SPNL). As a comprehensive framework and tangible plan, the landscape design fulfilled SPNL's focus on protecting the country's avifaunal wealth. Lebanon's geographic location on the path of winter-summer bird migration routes, its extensive plant cover and diversity of natural habitat makes it an important habitat for migrating birds. Birds travel along parallel routes to the forest, taking advantage of the wind currents favored by the slopes of Mount Hermon and the extensive shelter provided by the woodland (SPNL 2004). Through consultation with Birdlife International, Ebel-es-Saqi woodland was declared a bird migration "hot spot" and recognized as an Important Bird Area (IBA). Beyond the woodland, SPNL listed the entire rural landscape mosaic as defined by the master plan as a potential bird habitat (ibid) (Table 2). Associating the woodland with Birdlife International in turn bolstered the landscape master plan's proposal for the woodland to provide livelihoods from nature-related tourism, albeit bird watching (Figure 11). SPNL proceeded to build local capacity through workshops to train local

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<sup>5</sup>Architect Hana Alamudin was commissioned to prepare the design and implementation drawings for the *Bait Al Fallah*.



guides, plan tour packages for visitors to spend more time in the village to increase socio-economic benefits from nature-related tourism. Capacity building and the awareness campaigns were all the more significant considering that excessive and indiscriminant hunting is endemic throughout the region.

Zone I	Zone II	Zone III	Zone IV	Zone V	Zone VI
<b>Pine forest</b>	<b>Scrubland, Outcrop</b>	<b>Hasbani River Ecotone Valley</b>	<b>Hasbani River</b>	<b>Crop Fields</b>	<b>Olive Grove Buffer Zone</b>
Levant Sparrow hawk	Short-toed Eagle	Night Heron	Teal	White Stork	Song Thrush
Barn Owl	Lesser Kestrel	Grey Heron	Water Rail	Crane	Bulbul
Tawny Owl	Swift	Sparrow hawk	Little crane	Black Kite	Graceful Warbler
Little Owl	Skylark	Corncrake	Moorhen	Montagu's	Olivaceous
Woodcock	Swallow	Water Pipit	Coot	Harrier	Warbler
Turtle Dove	Hoopoe	Wren	Kingfisher	Crested Lark	Upcher's Warbler
Wood lark	Wheatear spp.	Blue Throat		Short-toed Lark	Olive Tree
Redstart	Woodchat shrike	BlackbirdSedge		Bee-eater	Warbler
Blackbird	Rock Sparrow	Warbler		Tawny Pipit	Orphean Warbler
Great Tit	Rock Bunting	Sardinian Warbler		Linnet	
Masked Shrike	Cinereous Bunting	Syrian Serin		Black-headed Bunting	
Chaffinch					
Greenfinch					
Goldfinch					

Table 2. Bird species associated with the zones designated by the Ebel-es-Saqi landscape master plan (source: SPNL, 2004)



Fig. 11. Ebel-es-Saqi IBA Poster (source: SPNL, 2004)

#### 6.4 Recognizing the rural landscape heritage

Another contribution of the landscape master plan, albeit less tangible, was re-introduction of vernacular concepts of nature conservation in Lebanese villages. The concept embodies community-based nature conservation, practices that ensure rights and obligations to protect communal grazing land, except under severe climatic conditions, such as drought, when the ban would be breached. Interpretation of the hima is landscape/context specific, differing from one region to another and equally between different Lebanese villages (Selwan, 2004). In essence, hima is an embodiment of community-based conservation. Far from being a relic vernacular, the concept of hima continues to function as an operational framework for sustainable land use and efficient management practices, a living cultural heritage (Makhzoumi, 2009). Revival of the concept is significant not only because it is integral to Lebanon's rural heritage but equally because community protection serves as an alternative to the prevailing, top-heavy state-declared and managed nature conservation.

Ebel-es-Saqi hima boldly marked on old cadastral maps uncovered early on by the landscape master plan team was further developed by SPNL that adopted the traditional reference, 'Hima Ebel', to refer to the IBA. The absence of prescribed conservation measures associated with the designation of an IBA encouraged adoption of hima by SPNL as a framework for managing the Ebel-es-Saqi woodland project.

Implicit in the adoption of the term 'Hima' is recognition of the value of traditional practices and vernacular wisdom and in promoting practical and socially equitable management of ecosystem goods and services. The concept of hima has since been recognized by IUCN as an effective alternative to formal protected areas and as representing site specific, community inclusive nature conservation (<http://www.iucn.org/where/asia/index.cfm?uNewsID=255> ).

## 7. Conclusion

This paper has argued that a landscape architecture reading of marginal rural settings is inclusive of physical and tangible environment and intangible cultural practices, perceptions and aspirations. The Ebel-es-Saqi case study demonstrates an approach, method and outcome that starts with a dynamic, holistic reading of the village landscape and follows through by constructing an open-ended, multifunctional framework to accommodate ongoing development, to empower and to enable the village community to reclaim stewardship of the woodland. The ecological landscape design methodology proposed here alerts designers that landscapes evolve over time and that they are contiguous across the spatial hierarchy encouraging them to look beyond tangible physical landscape to intangible human dimensions, local conceptions and valuation of the village landscape as shared heritage and identity. As a result, the landscape master plan, far from being an 'end-product' serves as an enabling place and community responsive framework for development. The interdisciplinary composition of the project team was a key to informing the landscape approach and guiding a sustainable writing of the woodland landscape. Pooling together their respective expertise, the authors of this paper concede to the complementarity of their academic and professional expertise as a necessary platform for sustainable rural development.

Underlying the specifics of the case study is the call to recognize biological and cultural the value of marginal rural landscapes in the eastern Mediterranean. From a conventional, agricultural development perspective, these degraded landscapes are not 'productive' and thus not of much value. From the standpoint of national nature conservation policies they are equally peripheral because they are not 'natural', but managed, lived-in. Valuation of traditional rural landscapes are equally lost between environmental scientists that focus on measures for preventing soil erosion and mitigating pollution of water resources and architects that prioritize the historical, vernacular built heritage in rural towns and villages. But nature in the Mediterranean as discussed at the start of this chapter has been managed traditionally to form a 'surrogate/constructed nature', part nature-part culture to borrow Tilley's term, the value lies in the totality. The value of the landscape approach lies partly in that it embodies the 'totality'. Tangible and intangible, physical and human, resources and processes, past and present are imbued in its form, pattern and cultural valuation of rural landscapes. Similarly, the discursive elasticity of 'landscape' as straddling the social sciences, sciences and design disciplines broadens outlook, scope and method of inquiry in landscape architecture, enabling an integration of the various disciplinary concerns. Expansive temporally to include not only the present but equally pasts and futures, spatially, to look beyond a designated site, the landscape approach balances social, economic, ecological and environmental developmental objectives.



Accepting that marginal rural landscapes cannot be protected in their entirety, they need to be recognized at a national scale within an integrated planning approach that incorporates socio-cultural, economic and environmental development with landscape as the conceptual and operational medium. Such integrated landscape planning will promote nature conservation, agricultural production, tourism and cultural heritage protection which lie at the heart of traditional rural landscapes in marginal Lebanon. Strategic interventions such as the Ebel-es-Saqi project become a means for the recognition and revival of rural traditions albeit within contemporary socio-economic and political contexts.

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## **Perspectives on Nature Conservation - Patterns, Pressures and Prospects**

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Perspectives on Nature Conservation demonstrates the diversity of information and viewpoints that are critical for appreciating the gaps and weaknesses in local, regional and hemispheric ecologies, and also for understanding the limitations and barriers to accomplishing critical nature conservation projects. The book is organized to emphasize the linkages between the geographic foci of conservation projects and the biological substances that we conceptualize as "nature", through original research. The reader moves through perspectives of diminishing spatial scales, from smaller to larger landscapes or larger portions of the Earth, to learn that the range of factors that promote or prevent conservation through the application of scholarship and academic concepts change with the space in question. The book reflects disciplinary diversity and a co-mingling of science and social science to promote understanding of the patterns of, pressures on and prospects for conservation.

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