Releasing Cultural Tourism Potential of Less-privileged Island Communities in the Mediterranean: An ICT-enabled, Strategic, and Integrated Participatory Planning Approach

Dionisia Koutsi and Anastasia Stratigea

1 Introduction

In contemporary societies, culture constitutes an inseparable part of the urban and regional policy agenda, perceived by some as a sector that crosscuts all three pillars of sustainability (economy, society, and environment), while by others as the fourth pillar of sustainable development (Hawkes 2001; Astara 2014). Due to the culture's prominent position in communities, it also plays, in the one or the other way, a pivotal role in the fulfillment of each single goal of the Agenda 2030 (UCLG 2018). The realization of the exceptional role of culture in the twenty-first century has rendered it a critical resource and a key driver for achieving future development objectives (Pita da Costa 2017). Such objectives are strongly oriented toward the sustainable and resilient exploitation of *cultural resources* for maintaining cultural integrity, preserving local values and ecosystems, and generating new opportunities for employment and income; while giving rise to the experience-based *cultural tourism paradigm* (UNTWO 2018; Stratigea and Katsoni 2015, 2016). The latter seems to be an already quite noticeable and dynamic trend in the evolving tourism market—the supply side—in response to demand-driven patterns as to new, meaningful, and authentic tourism experiences (UNWTO 2018), roughly presented as a combination of four *'e'* words, namely, *e*ntertainment, *e*xcitement, *e*ducation, and *e*xperience of tourists (Stratigea and Katsoni 2015).

But what is exactly meant by culture and its content, namely, cultural resources or cultural heritage (CH)? This question has not a clear-cut answer. CH is created over thousands of years ago and is inherited to current generations, while it continuously

D. Koutsi (✉) · A. Stratigea
Department of Geography and Regional Planning, School of Rural and Surveying Engineering, National Technical University of Athens, Athens, Greece

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evolves through the perpetual *human–nature interaction*. It thus represents the past and the present, while demarcates the future of each single community. It encompasses the *tangible*, e.g., human settlements, industry, agriculture, but also the *intangible* elements of this interaction, e.g., aesthetics and spirituality, cultural identity and value systems, to name a few. As Harrison (2010) claims, for each tangible part of heritage, an intangible one "wraps" around it, creating an integral and indivisible whole that is experienced by people or managed by tourism managers. In his effort to clarify the meaning of culture, Richards (1999) reveals the close relationship between tourism and culture or cultural resources. According to his view, cultural resources can be grasped as the outcome of the social structure (e.g., perceptions, beliefs, values), what people do (e.g., behavioral patterns, traditions, lifestyle), and what they produce (e.g., cultural products, gastronomy). Thus, consumption of cultural resources by tourism, marking the *culture and tourism complex*, is not just about visiting cultural sites and monuments, i.e., the tangible footprint of CH, promoted by traditional cultural tourism models; but it also involves the consumption of the intangible elements of areas visited. This delineates the current view of *cultural tourism*, perceiving tangible and intangible elements of a certain tourist destination as a consolidated and coherent whole. This view is also reflected in the definition of cultural tourism by the World Tourism Organization, portraying this as "*a type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination. These attractions/products relate to a set of distinctive material, intellectual, spiritual and emotional features of a society that encompasses arts and architecture, historical and cultural heritage, culinary heritage, literature, music, creative industries and the living cultures with their lifestyles, value systems, beliefs and traditions*" (Richards 2018: 3). Such a definition unveils the strong relationship of culture and tourism and the tight linkages of cultural products, consumed by tourists, to the everyday life and habits of destinations' population (UNWTO 2018).

Counting over 39% of tourism arrivals in 2014 (UNWTO 2018), *cultural tourism* constitutes currently a *major trend* and an essential feature in many tourist destinations' profiles (Katsoni and Stratigea 2016), but also an attractive element that firmly influences visitors' destination choice. Rising interest in cultural tourism as well as relevant policy initiatives has resulted in its further specialization into several distinct place- and resource-based alternative forms, e.g., historical, natural, maritime, monument, and diving tourism, to name a few. A particular type of cultural tourism form, recently receiving much attention in terms of both attractiveness to visitors and concerns as to the CH preservation and sustainable exploitation, refers to the *dark tourism*. This form is associated with tourist activities intimately related to death and/or war disaster sites. Destinations falling into the "dark tourism" category are nowadays proliferating in the global tourist realm and are also varying in content, taking forms of concentration camps, sites of major human disasters, etc. (Sharpley 2009). Of rising importance is also a subset of dark tourism, the *battlefield tourism* that is linked to battlegrounds where historical martial events have occurred, e.g., incidents of World War I or II, and are witnessed through, e.g., martial

installations' sites, sites of sunken ship and plane wrecks (Kunwar and Karki 2020). It should also be noted here that although land cultural resources and cultural tourism have been extensively explored during last decades, the same does not hold for maritime cultural resources. However, the latter are nowadays attracting interest in terms of both their preservation and sustainable exploitation as CH objects, in alignment with respective interest in maritime cultural or diving tourism, and policy developments addressing the multiple benefits expected by their sustainable exploitation (Koutsi and Stratigea 2019).

One distinguishable example of areas endowed with exquisite tangible and intangible, land and maritime, natural and cultural resources are small islands in the *Mediterranean Region* (Manera and Taberner 2006). Based on these resources, some of these islands are by far the most attractive and highly appreciated destinations in the world (Koutsi and Stratigea 2019). However, apart from some exceptions, small island regions in general but also a large number of Mediterranean island regions in particular are distinct examples of underdeveloped spatial entities. Moreover, they seem to face severe barriers in strengthening their position as tourist destinations in a rapidly evolving and highly demanding tourism market. *Insularity*, in this respect, causes a range of inadequacies and bottlenecks that result in a certain deficit as to the effectiveness of islands' developmental endeavors. Removal of insularity constraints and the tracking of more promising as well as place- and people-centered developmental trails of these peculiar spatial entities in the Mediterranean is the *motive* of this work.

The specific *goal* to be served, along these lines, is the sustainable exploitation of cultural resources in remote, lagging-behind insular territories in the Mediterranean Region; and the flourishing of these astonishing areas as distinct, authentic and qualitative, experience-based cultural tourism destinations. The structure of this work has as follows: in Sect. 2, insularity repercussions of Mediterranean island territories and cultural tourism perspective as a means for dealing with them are discussed; in Sect. 3, current concerns and planning streams are delineated and are integrated into the steps of a strategic participatory planning framework; in Sect. 4, the implementation of this framework in a specific case study—island of Leros, Greece—is exemplified, coupled with key empirical results produced, while finally in Sect. 5 some conclusions are drawn.

2 Insularity and Cultural Tourism Potential in Remote and Less-privileged Mediterranean Islands

The geographical borders of many European states, especially of the Mediterranean ones, incorporate island regions in their jurisdiction. Many of these regions, based on their cultural and natural assets, are by far some of the most attractive and highly appreciated tourist destinations, owning an international brand name, e.g., the island state of Malta, Ibiza in the Balearic Islands-Spain or Mykonos in the Aegean

Sea-Greece, to name a few. However, there are also a large number of islands that do not share the glory of the previous examples, they remain underdeveloped, and they are confronted with severe difficulties in their efforts to gain competitiveness as tourist destinations (Koutsi and Stratigea 2019). In most of the cases, small island regions are perceived as disadvantaged, fragmented and isolated, lagging-behind areas. The reason for that lies in a range of inadequacies that are summed up under the term "*insularity*" and confine successful outcomes of their developmental efforts (European Parliament 2019). Various researchers link insularity with "*smallness*" and "*remoteness*" or "*peripherality*," emphasizing thus the limited geographical space and the water-based discontinuity, i.e., the natural barriers (sea) separating insular territories from the mainland, as the most distinguishable characteristics of island territories (Rontos et al. 2012), and the reason behind their unsuccessful developmental pattern. At this point, however, it should be noted that although insularity is a common attribute of almost all islands, its intensity is highly dependent on their proximity to the mainland (Mannion and Vogiatzakis 2007; Pungetti 2012).

According to Stratigea et al. (2017), insularity consequences are summarized as follows: location of islands in the state's periphery; confined geographical space and related availability of natural resources; a demographic pattern that is characterized by low density and an ageing, of low educational profile and digitally illiterate population, mainly employed in the agricultural or tourist sector (Chatziefstathiou et al. 2005); lack of economies of scale, delimiting the flourishing of local economy; bottlenecks that are due to geographical fragmentation and are mostly associated with the insufficient infrastructure for serving basic population needs (e.g., health and transport infrastructure). Furthermore, isolation and accessibility constraints are often causing difficulties for younger population groups in accessing educational opportunities, with higher education studies being usually associated with migration to the mainland. Limited labor market opportunities are also a defining factor and one that reinforces migration of youth and productive age groups to the mainland, further weakening the strength of the population pyramid. In addition to the above weaknesses, European islands and especially the Mediterranean ones are confronted with significant challenges as host regions of a large number of immigrants during the last few years. Greek islands, for example, being at the forefront of this immigrants' wave, are nowadays coping with severe consequences in social, economic, cultural, and environmental terms.

Flourishing of local economies in insular territories is constrained by the lack of economies of scale. Moreover, scarcity of natural resources (e.g., water, land or primary resources) leads, in most cases, to a certain shortage in agricultural and industrial products, thus increasing islands' reliance on more costly imports from distant larger markets. Higher transportation costs that are due to insularity also affect competitiveness of economic sectors and place severe barriers to the efforts of local businesses to become competitive counterparts in the European and international markets (Chatziefstathiou et al. 2005). A certain deficit also appears in skilled and highly educated human resources, resulting in low innovation rates and discourage of investments (Carbone 2018). This, in turn, prevents the flourishing of local

economic sectors and causes the further loss of human power (Rontos et al. 2012). These constraints have so far led to an occasional and seasonal (summer period) mono-sectoral developmental pattern, largely based on mass tourism activities. This pattern is the source of significant environmental and social burden which, most importantly, goes beyond the carrying capacity of these limited geographical entities at certain time slots, while leaving island economies highly exposed to a volatile and sensitive to external shocks economic sector, i.e., tourism.

Insular territories in general are hosts of unique *natural features* (e.g., coastline configurations, NATURA 2000 regions, wetlands). However, many of these are quite fragile and vulnerable to drought and land degradation, rising sea level and coastal erosion (Margaras 2016). These pressures, being usually the outcome of unplanned decisions or thoughtless human activities, but also of disturbing developments of the external environment, e.g., climate change, when coupled with the low capacity of these regions to deal with them, place islands' communities and economies at risk of losing part of their scarce resources (e.g., water, arable land, or valuable ecosystems and coastal areas). Consequently, there is an urgent need to address the challenges that need to be dealt with in island regions and seek alternative pathways for achieving sustainability and resiliency objectives.

Apart from their exquisite natural attributes, island regions are hosts of extraordinary tangible and intangible *cultural resources*, both in land and maritime environments (Pungetti 2012). This holds especially true in small islands of the Mediterranean Region (Manera and Taberner 2006) and is the outcome of their exceptional geopolitical position at the intersection of three continents—Europe, Africa, and Asia—and their location at the crossroad of commercial sea routes (Stratigea et al. 2017). This has enabled a strong physical and cultural interaction among various places, civilizations, and cultures throughout the centuries. The overexploitation of these resources but also exogenous factors can place them at risk of loss, an issue that is currently gaining importance especially in the case of underwater cultural heritage (UCH) laying at the bottom of the Mediterranean Sea (Argyropoulos and Stratigea 2019a).

Speaking of the *Mediterranean scenery*, this is formed by approximately 5000 islands of different shapes and sizes (Mannion and Vogiatzakis 2007), which are marked by a highly contrasting topography and are exhibiting a unique topographical diversity and altitudinal differences, coupled with spectacular mainland and coastal backgrounds (Stratigea et al. 2017). A majority of these islands present a remarkable richness in natural heritage, with many of them being currently under protected areas' regime. From a *cultural resource* perspective, Mediterranean islands, as the settlements of some of the most significant civilizations, are disposing unique and multicultural remains (ENPI-CBC-MED 2015). Indeed, Mediterranean island landscapes have a great symbolic and historical value, while historical monuments and mediaeval settlements are preserved in most islands, bearing witness to their glory past (Vogiatzakis et al. 2008). Furthermore, the involvement of many of these islands in a range of historical events of European or even global significance, e.g., World War I and II, but also remains of their recent historical trajectories, renders them historical places of global reach. This involvement, in case

of various Greek islands for example, took the form of foreign occupation or fatal war events taking place in the islands' territory and has left important evidence in the form of intangible (e.g., habits, language idioms, gastronomy, values), but also tangible remains (e.g., architecture and buildings, batteries and military installations, ship and plane wrecks) in their land and maritime environment (Koutsi and Stratigea 2019).

The aforementioned attributes of Mediterranean islands are perceived differently by *visitors* and their *inhabitants* (Vogiatzakis et al. 2008). The former consider the coastline as the great advantage of these areas; and they are keen on their remoteness, being translated into a chance to escape from noisy, polluted, and stressful urban environments, and combine entertainment with cultural authentic experiences. The latter realize insularity as a major constraint and a source of unenviable socioeconomic and environmental repercussions. And the question is: how can we combine natural and cultural heritage of endowed island territories in building attractive and authentic cultural tourism products? How win-win solutions can be produced, i.e., meeting visitors' desires and expectations as well as exploiting land and maritime resources for reaching sustainability and resilience objectives and wealth of these territories and their population? What should be the most suitable steps for planning the transition from remoteness to advantage and increase attractiveness of insular regions to local population and the external world? How can local population be engaged in such a planning exercise in order to manage own resources in alignment with own expectations? How can Mediterranean islands' cultural heritage of European or global reach be preserved and its messages be spread out to a wider audience? An attempt to properly respond to these questions is presented in the next sections.

3 The Methodological Framework

Current evolutions in the planning discipline that are relevant to cultural resource management endeavors and can partially deal with the previously raised questions are discussed in this section and are integrated into the steps of a strategic participatory methodological approach for carrying out relevant planning exercises.

3.1 Key Concerns Relevant to Cultural Heritage Planning Endeavors

Planners nowadays have to deal with wicked problems within a rapidly changing, globalized, and wired environment, key aspects of which are uncertainty and complexity. In accomplishing their tasks, they need a repertoire of *tools and approaches* that will allow them to (Stratigea 2015):

- Grasp potential future developments of the external to the study region/problem environment and the future world images these can produce, i.e., delineating the *decision environment*, within which solutions of planning problems need to be implemented.
- Sketch *community- and place-based solutions* of planning problems within each single decision environment.
- Delineate *policy pathways* that are plausible, gather consensus, and can steer the smooth transition from the current state to a desired end.

For dealing with uncertainty and complexity, planners are largely supported by evolutions in the planning discipline, among which the context of *strategic planning* is falling (Cooper 1995; David 2003; Cornish 2004; Boškovic et al. 2010). Strategic planning seeks to identify desired end states for a certain region and/or problem at hand and related policy paths leading to these states that are better adjusted to diversified external decision environments. *Key aspects* of strategic planning are as follows (Stratigea et al. 2016):

- *External environment*, where potential evolutions of a range of different fields, such as population and income patterns, market developments, technological concerns, climate change issues, political framework at the national and international level, etc., are explored. A combination of different developments in each specific field sketches distinct future images of the external environment, forming the decision context within which planning problems for a specific region need to be dealt with.
- *Internal environment,* referring to the study region and/or problem at hand, where key issues for getting further insight are as follows: (1) *Current state* of the study region and planning problem at hand or stated differently "where we currently stand,", implying a detailed exploration of socio-economic, environmental, technological, cultural, political, and value aspects. (2) *Desired future state* or "where we want to be in the future," usually expressed through a *vision* that is built upon views, desires, and expectations of local community groups. This introduces the need for a participatory vision-building process, aiming to identify the interests of the various societal groups and reach a compromise among them in order for a *consensus* to be built as to the desired end state or the vision to be pursued. (3) *Policy paths* that are capable of linking current to visionary state, namely, policy directions, measures, and actions that are adjusted to local value systems and can steer developments toward the desired end state.
- Strengths and weaknesses of the internal environment (study region) that are critical for coping with rising opportunities but also threats emerging from the external environment. Or stated differently, how developments of the external decision environment can affect progress and problem-solving in the study region. This is grasped by conducting a *SWOT analysis* as an integral part of each strategic planning exercise.

Managing the *culture-tourism complex* necessitates a multi-dimensional, cross-sectoral, and interdisciplinary approach, while bringing to the forefront the issue of

cultural governance, i.e., a multi-spatial level and multi-stakeholders' consideration (Baltà Portolés et al. 2014; Argyropoulos and Stratigea 2019a, b). Such a management perspective needs also to be undertaken within a *decision environment—the external one*—demarcated by a number of international conventions and policy directions, with reference to both the global and the European levels. This unveils as a prevailing feature the issue of preservation and protection of cultural resources for current and future generations and stresses the importance of participatory, sustainable, and resilient cultural resource management for cultural tourism purposes (Ahmad 2006). The most important aspects of this decision environment, explored for the purposes of the empirical part of this work, are emerging from the following:

- "Protection of the World Cultural and Natural Heritage" and the "Safeguarding of the Intangible Cultural Heritage," stressing the value and interpretation of intangible cultural heritage for establishing place identity, social cohesion, cultural diversity, and creativity (UNESCO 1972, 2003)
- "International Cultural Tourism Charter," defining communities' involvement in cultural resource management, synergies' creation among stakeholders and adoption of sustainable tourism models that promote cultural identity (ICOMOS 1999)
- European Convention on the "Protection of the Archaeological Heritage (Revised)," addressing the protection of archaeological heritage as a source of the European identity and a resource of historical/scientific wealth, tackling also issues of archaeological interests in spatial planning endeavors (Council of Europe 1992)
- Convention on the "Protection of Underwater Cultural Heritage," defining UCH types of cultural importance and disentangling issues of ownership and public access (UNESCO 2001)
- European Agenda for "Culture in a Globalizing World," exploring the significance of culture with respect to tourism and providing input for the articulation of the objectives of a new EU Agenda for Culture and the drafting of innovative models of cooperation and partnerships' creation (European Commission (EC) 2007a)
- "Agenda for a Sustainable and Competitive European Tourism," placing sustainable tourism at the heart of policy agenda; stressing issues of protection and preservation of non-renewable cultural resources and the unbreakable links between culture and tourism; and adopting a holistic and integrated approach of tourism with the rest of the economic sectors and society (European Commission (EC) 2007c)
- "Europe, the World's No 1 Tourist Destination—A New Political Framework for Tourism in Europe," focusing on sustainable tourism issues and the promotion of a sustainable, responsible, competitive, resilient, and of high-quality European destinations' image (European Commission (EC) 2010)
- "European Strategy for more Growth and Jobs in Coastal and Maritime Tourism," promoting sustainable development and competitiveness of coastal and maritime tourism; and innovative alternative tourism forms for addressing economic

growth, social cohesion and environmental concerns (European Commission (EC) 2014)

Regarding the maritime cultural environment and particularly the UCH, additional policy considerations, related to the blue economy and Maritime Spatial Planning, need to be taken into account. Furthermore, in 1992 the issue of Integrated Coastal Zone Management (ICZM) came to the forefront in order for significant pressures, exerted on coastal areas, to be addressed. At the European Union (EU) level in this respect, of crucial importance is the creation of new, innovative, and effective ways of sustainable exploitation of maritime resources, a fact that is reflected in several policy documents, such as the EU Integrated Maritime Policy (IMP) (EC 2007b), the Blue Growth Strategy (EC 2012), and the Maritime Spatial Planning (MSP) (Directive 2014/89/EU). From a cultural resource perspective, it is worth noting here that although the role of UCH in pursuing sustainable heritage-led local development has not gained adequate attention, all three previously mentioned EU directions present a certain opportunity for its spatial delineation, preservation, and sustainable exploitation toward maritime cultural tourism directions.

An integral part of strategic planning is *scenario building*, with scenarios falling into a group of planning tools that are capable of effectively addressing uncertainty and complexity of spatial systems and their evolution (Lindgren and Bandhold 2003; Cornish 2004). The use of scenarios in planning exercises actually reflects a shift from the view that "the future is there to be predicted" to the one of a "socially-constructed future," where a systematic study of potential future developments is perceived as a way for creating "the most desirable end state." Key attributes of a scenario building process are *system-thinking* and *actor-thinking*. System-thinking is about thinking in layers of change, dependencies and interdependencies. It implies a deep insight into a (spatial) system and its components (subsystems) as well as their interrelationships, potentially revealing the key variables that can drive a system's change (Cornish 2004). *Actor-thinking* is taking for granted that the future is shaped by *actors' decisions and actions*, both inside and outside the study system (Godet et al. 2004). A thorough analysis of the actors' interests can thus provide a deeper understanding of potential future developments, based on power relationships, strategic moves, motives and attitudes, personal profiles, alliances, strengths, and weaknesses, to name a few (Lindgren and Bandhold 2003).

Speaking of strategic planning and the deployment of future scenarios for serving developmental goals, *community engagement* becomes an indispensable dimension of relevant endeavors (Healey 1997; Allegretti 2006; Boškovic et al. 2010; Abdalla et al. 2015; Stratigea 2015; Stratigea et al. 2018; Somarakis and Stratigea 2019). This emerges from the very nature of these tools as the means for gathering collective intelligence from a variety of actors, but also from the current understanding that community engagement in developmental planning studies is no longer optional, but it is imperative (Nalbandian et al. 2013). This holds even truer in case of planning exercises addressing the issues of *cultural resource management*, where communities' *right* but also *responsibility* to take part in decision-making processes are stressed (Trau and Bushell 2008; Rössler 2012; Panagiotopoulou et al. 2018a, b;

Koutsi and Stratigea 2019; Argyropoulos and Stratigea 2019a). Community engagement was rather underestimated in many relevant studies in the past (Jimura 2011), which had rated lower issues such as self-determination, cultural survival, and pride stimulation of local communities (Dyer et al. 2003). On the contrary, prominence was given to the integration of regions into a globalized trading system for reaping the economic benefits out of it (Higgins-Desbiolles 2003; Jamal and Dredge 2014). However, the convergence of the rising interest in cultural tourism and respective destinations (Richards 2014; Katsoni et al. 2017) on the one hand and the enriched planning repertoire of recent decades on the other has fueled new approaches in integrated and sustainable cultural tourism studies (Jamal and Dredge 2014; Stratigea and Katsoni 2015; Katsoni et al. 2017). These are mainly characterized by their *focus on people* in local contexts and small-scale bottom-up strategies for cultural tourism development (Scheyvens 2002). As Jureniene and Radzevicius (2014) notice, currently the world seems to realize the three powerful components of cultural tourism, being heritage protection, heritage management, and local community.

Currently, *community engagement* in planning cultural tourist development gains ground. Indeed, the number of studies that take into account the voices of local communities is proliferating, in order for tourism models that are respecting carrying capacity of destinations; are in alignment with visions, expectations, and needs of local communities; and are conforming to local value systems to be promoted (Buono et al. 2012; Bello et al. 2016). In shifting from a historically top-down, mainly driven by governments and tour operators, to a bottom-up approach targeting sustainable and resilient cultural tourism trails in destinations, *empowerment* of local communities and *participation* in relevant planning endeavors are of decisive importance (Sofield 2003). Such endeavors place local community groups as equals to policy makers and planners for: embedding indigenous knowledge in decision-making processes; and ending up with cohesive, authentic, experience-, and value-driven cultural tourism narratives as well as locally adjusted strategies to promote them. At the same time, they contribute to *community awareness raising* as to the imperative of safeguarding scarce, precious, sensitive, and non-renewable cultural resources.

Management of cultural resources for cultural tourism purposes is largely an issue of proper *spatial data management and communication / interaction*.

Spatial data management aims at collecting, analyzing, and visualizing qualitative and quantitative data on cultural resources and sketching, out of these data, attractive cultural tourism products or routes. Geographical Information Systems (GIS) are extremely important in this respect. Furthermore, empowerment and participation imply access to information that is strongly dominated by visual media in the form of *maps and images*, with textual description being an important subcomponent of such information (Hudson-Smith et al. 2002; Kahila and Kyttä 2009; Panagiotopoulou and Stratigea 2017). Maturity of GIS technology has allowed its extensive use beyond very technical environments and has broadened its potential for spatial data management and visualization of planning proposals in a GIS environment. This, coupled with Web developments, has brought forward

interactive Web-based GIS exploitation as a bidirectional interactive approach that is capable of (Hansen and Prosperi 2005; Stratigea 2015; Panagiotopoulou and Stratigea 2017; Panagiotopoulou et al. 2018a): ensuring equal access to information; rendering participation more wide and substantial due to the better grasping of spatial data and problems; creating new perspectives for social inclusion; and strengthening democratic procedures that support efficiency of spatial decision-making.

Communication / interaction is largely facilitated by the use of Information and Communication Technologies (ICT) and their applications, enabling a number of actions, such as: digital cultural content creation, visualization, and managing; mapping of cultural resources and crowdsourcing (Brabham 2008; Oomen and Aroyo 2011; Duxbury et al. 2015; Panagiotopoulou et al. 2018a, b); effective marketing of cultural tourism products (Panagiotopoulou and Stratigea 2017), to name a few. Due to their potential, such tools are nowadays considered an integral part of *cultural tourism planning initiatives*, while marking the emerging *smart tourism development* paradigm (Gretzel et al. 2015).

Within the currently ICT-enabled environment and the plethora of applications for gathering, management, and communicating planning information, the concepts of *participatory e-planning* and *community e-engagement*—i.e. technology-mediated interaction in the planning context—are born, marking a newly emerging stream of research and practice in planning endeavors (Klessman 2010; Saad-Sulonen 2012). e-Planning and e-engagement are inherent to a digitally enabled planning process, effectively integrating spatial planning approaches, public participation, and visualization techniques; and steering new opportunities as well as innovative and inclusive solutions for dealing with wicked planning problems and ensuring wide engagement and thus commitment to planning outcomes (Panagiotopoulou and Stratigea 2017; Somarakis and Stratigea 2019).

Empowerment and engagement of local communities is nowadays largely enhanced by the Internet and Web-based applications, bringing to the forefront the concept of *digital citizenship*, i.e., online participation in societal issues (McNeal et al. 2007). Digital citizenship is largely supported, among others, by *social media*, perceived as quite popular means for interaction for a number of purposes; and a means that embeds actors in glocal (global and local) networks by using ICT-enabled and non-mediated networking for a shared purpose (Horelli and Wallin 2010). A broad and comprehensive definition of this new communication pattern is provided by Kaplan and Haenlein (2010), defining *"social media"* as a group of Internet-based applications that is grounded on ideological but also technological foundations of Web 2.0. From the perspective of e-planning, social media and networking allow the provision of e-services for community revitalization, the creation of community groups sharing the same concerns, the enlargement of space of people activity, the potential to map and transmit information about things happening in their neighborhood, and the e-engagement in dedicated e-planning exercises, to name a few.

The remarkable changes and innovations related to the maturity and wide use of GIS technology, the potential offered by ICT, and the advent of Web 2.0 and

interactive Web-based GIS as well as the explosion in the use of social networks are currently penetrating the political, economic, cultural, and social realm and are expected to considerably alter the scenery of Web-enabled participation and a variety of e-planning exercises (Stratigea 2015), but also the demand and supply side evolutions of cultural tourism in the years to come.

3.2 Building up a Strategic ICT-enabled Participatory Framework for Planning Cultural Tourism

The aforementioned streams, prevailing in the planning discipline nowadays, have fed the development of a strategic ICT-enabled participatory framework for planning cultural tourism (Fig. 1).

Step 1 refers to the delineation of a *place- and community-based vision*, i.e., the end state of the strategic planning exercise. This is further specialized into a *goal* and related *objectives*, i.e., priority axes for planning interventions in order for the vision to be reached.

Step 2 is associated with the exploration of trends or policy directions—the external decision environment—as well as the internal one, i.e., the study region. With respect to the *external environment*, culture- and tourism-related dominant trends and interdependencies at the global and European scene are identified, as decisive factors that frame decision-making toward cultural resource management. This is combined with an in depth analysis of the *internal environment*, i.e., the study region, incorporating the survey of the *current state* of the area of concern (social attributes, local economic structure, infrastructures, natural characteristics, comparative advantages, problems, etc.); and the assessment of its strengths and weaknesses as well as opportunities and threats emerging from the external environment through a SWOT analysis. Furthermore, this step involves a thorough identification and GIS-mapping of cultural resources.

Based on the exploration of the external and internal environment as well as the mapping of cultural resources, in *Step 3*, *alternative cultural tourism future development scenarios* of the region under study are structured, each one accompanied by the description of a diversified *scenario narrative*. Particular emphasis, at this step, is placed on the spatial pattern of cultural resources and the building of scenario narratives that can effectively integrate these resources.

Step 4 forms the core of *community engagement* in the context of the case study. Its goal is to engage local community in assessing the proposed scenarios. More specifically, *participatory assessment*, conducted at this step, aims at gathering opinions as to the proposed scenarios as well as preferences of local communities for scenarios' prioritization and supports the choice of the prevailing one that embeds local expectations. Furthermore, community is engaged in rating priority axes that are set in Step 1. The outcome of this step is a certain planning decision, i.e., selection of the *dominant scenario* for serving sustainable, inclusive and

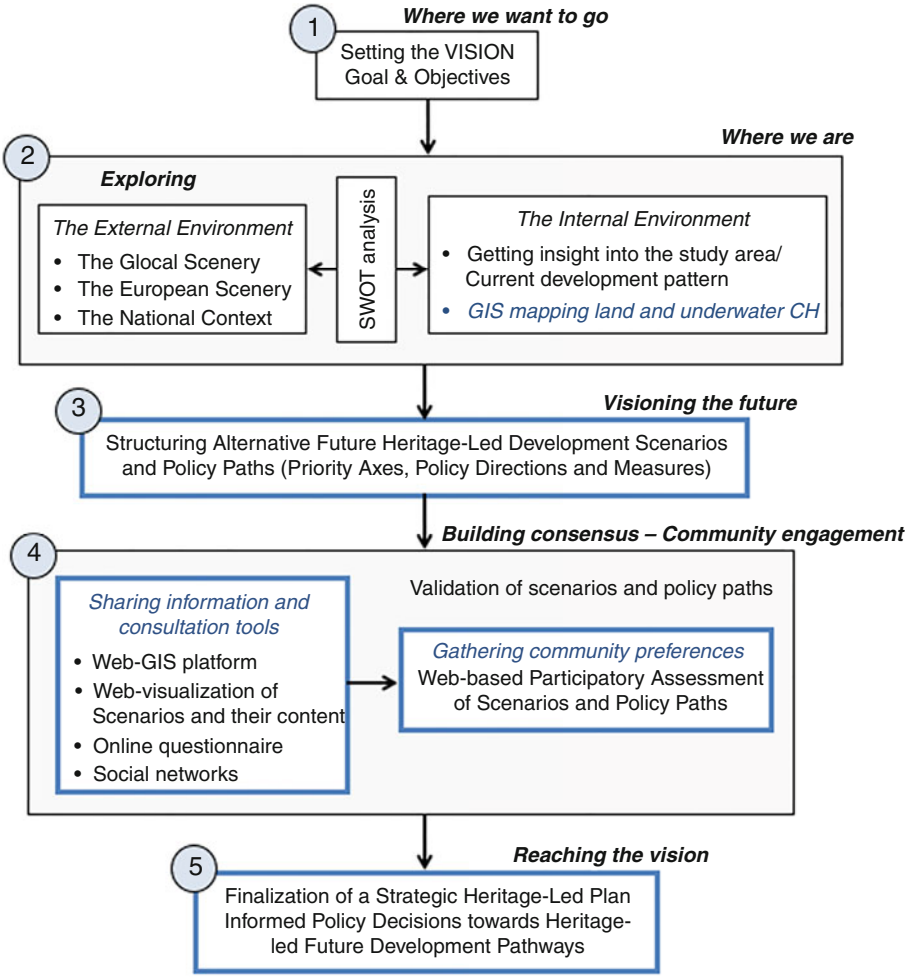

Fig. 1 Steps of the proposed strategic participatory planning framework for planning cultural tourism. Source: Adapted from Koutsi and Stratigea (2019)

resilient cultural tourism futures; and prioritization of policy directions for implementing this scenario that are in alignment with community preferences and expectations.

Finally, *Step 5* of the proposed participatory planning framework relates to the finalization of a strategic cultural tourism development plan, comprising the detailed description of the prevailing scenario and related policy paths, in order for more cohesive and informed policy decisions to be made for its implementation.

4 The Leros Island Region

A short description of the Leros case study is provided in the following, coupled with discussion on the results obtained from the implementation of the proposed methodological framework of Fig. 1.

4.1 Setting the Scenery: The Leros Case Study

Before embarking on the implementation of the proposed methodological framework for cultural tourism planning in the specific case study of Leros, it is important to realize the very peculiar nature and attributes of this specific remote, fragmented, and less-privileged Mediterranean island territory.

Leros, although part of the complex of the south-eastern Aegean Region (Fig. 2), has not followed developmental pathways of other islands of this region, being tourist destinations of global reach (e.g., Rhodes, Kos). On the contrary, various historical events and political choices through time have rendered this island *a place of isolation and abandonment*; and a *lagging-behind* small island in developmental terms, compared to other Aegean or Dodecanese counterparts.

A distinguished feature of this region in its historical trajectory is *foreign occupation*, rendering Leros the crossroad of various civilizations and cultures in different time slots. This was mainly due to its attractive location as a strategic natural fortress in the Aegean Sea, a privileged location though loading the island with many traumatic events (Koutsi and Stratigea 2019). Indeed, the historical trajectory of

Fig. 2 Geographical location of Leros Island. Source: Leros (2020), Areianet (2020)

Leros was marked by Turkish occupation for more than one and a half centuries (1648–1821); Italian occupation until World War II period (1912–1943); and German occupation during 1943–1948, beyond which Leros was annexed to the Greek state.

The most remarkable of these occupation time slots was the Italian one, which had transformed Leros into a heavily fortified aeronautical base for serving Italian dominance over the Mediterranean Sea (Koutsi and Stratigea 2019; Argyropoulos and Stratigea 2019b). This was due to the excellent, deep water port of Lakki, the largest natural port in the Eastern Mediterranean. The role of Leros as an Italian aeronautical base had a catalytic effect on the island's spatial organization and development pattern, marked by: the construction of a number of military installations across the island, such as fortifications, firearm locations, gun emplacements, to name a few; and the establishment of the Lakki harbor as a base for the Italians' supremacy in the Mediterranean in general and the Dodecanese island complex in particular. Many remains of this time slot are still intact and today yet accessible, constituting an outstanding ensemble of history and culture and a bedrock for cultural tourism, if adequately preserved and properly promoted to potential market niches. Large infrastructural projects were also deployed in this period, such as the central road network, linking diverse areas of Leros Island and serving transportation needs even today. Of great cultural interest are also the particular architectural buildings in the city of Lakki, exuberantly exuding the scent of Italian architecture in the island (Kostopoulos 2005). The end of the Italian occupation and the transition to the German one was accomplished through a quite notable, for its human and arms' loss, event of World War II, the famous naval battle widely known as *"The Leros Battle"* or *'Operation Typhoon"* (November 1943). Lasting 22 days, the Leros Battle resulted in a significant amount of underwater historical remnants (Mentogiannes 2004). Indicative land and underwater remains of this period are depicted in Fig. 3.

It is worth noting here that the World War II period (1939–1945) was marked by extensive naval warfare and military operations, many of which took place in the *"Mediterranean Theater"* (Argyropoulos and Stratigea 2019a, b). However, and despite the abundance of UCH as remnants of famous battlefield scenes, witnessing historical events of this period in the Mediterranean (e.g., in Croatia, southern France, Greece, Italy, and Malta, including North Africa), the *narratives* of many of these Mediterranean scenes and sunken heritage (ship and plane wrecks) are largely unknown today; while many of them still lie underexplored or fully unexploited and, most importantly, unprotected by international conventions and, in many cases, national laws (Argyropoulos and Stratigea 2019b). Leros is one of these scenes, the ground for *"The Battle of Leros,"* which has left behind important and of multiple origin (Greek, Italian, German, etc.) remnants, some of which were holding iconic status for the Greek nation, e.g., RHNS Vasilissa (Queen) Olga (Thoctarides and Bilalis 2015).

In its recent history in the second half of the nineteenth century and beyond, the "image" sent out by Leros Island is the one of a *"Soul House."* This is the outcome

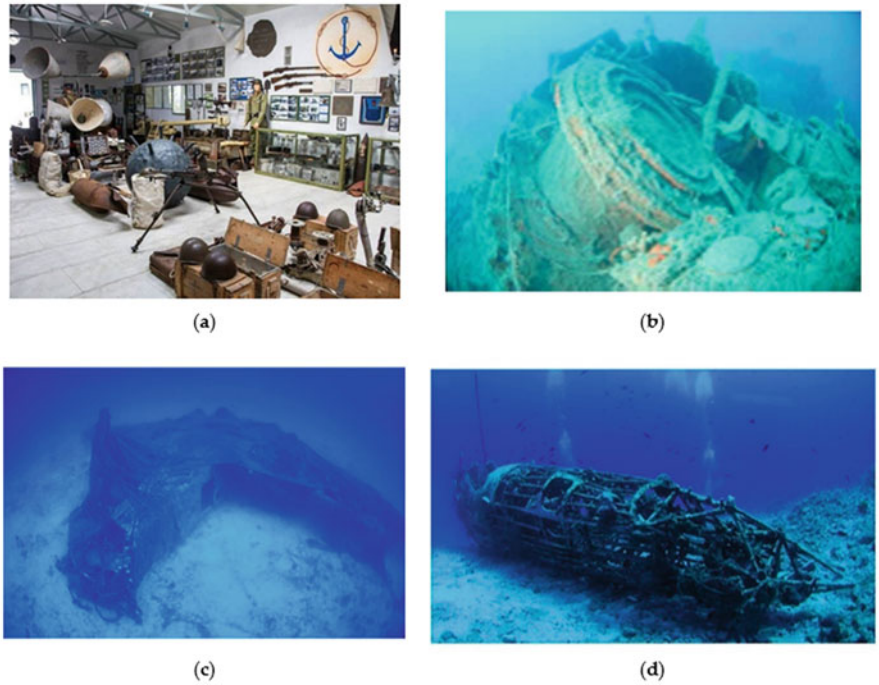

Fig. 3 Indicative land and underwater cultural heritage—(U)CH)—in Leros Island—World War II remnants. (**a**) War museum "Deposito di Querra" (Lerosisland.gr 2020) (**b**) Destroyer 'Queen Olga', sunk in 26 September 1943 in Lakki Bay (Collings 2008) (**c**) JUNKERS JU 52, sunk in the Battle of Leros, 13 November 1943 (Collings 2008) (**d**) ARADO 196, German hydroplane (Collings 2008)

of notably *political choices* that had rendered Leros (Koutsi 2018; Koutsi and Stratigea 2019):

- A *concentration camp* for mentally disturbed people (1957–1992), taking over the extensive military installations left on the island by the Italian occupation time slot ("The Europe's guilty secret" or a "hidden scandal" for human rights, as noticed by Observer in 1989)
- An *exile camp* for dissidents during the Greek dictatorship period (1967–1974)
- A *"hot spot"* for hosting part of the refugees' wave, embarking on the Easter Aegean islands' complex (2016–today)

This "image" has largely traumatized Leros' destiny and developmental trajectory, leaving unexploited the extraordinary cultural but also natural local assets. It has also negatively affected the local economic structure through time (unemployment rates rise to 11% in 2011) and social cohesion, while local population (7917 inhabitants in 2011 census) and administration are struggling for altering this image toward more promising future developmental pathways.

Taking into consideration the drawbacks and constraints emanating from Leros historical course, but also comparative advantages drawn from *insularity* (Spilanis 2012), the cultural tourism planning exercise in Leros Island is a quite challenging effort. In fact, it aims at combining goals related to both: the *"big picture,"* i.e., preserving European cultural heritage remains and integrating their tangible and intangible aspects in order for their meanings to be effectively conveyed to future generations, thus safeguarding European history, identity, and memory; and the *more partial but equally important* one, i.e., the integrated, sustainable, and resilient exploitation of tangible and intangible, natural and cultural, land and maritime resources for reversing the unpleasant destiny of Leros Island and reaping the benefits of current cultural tourism market trends.

In seeking to achieve this twofold goal, a strategic planning exercise is conducted based on the aforementioned methodological framework (Fig. 1), with work carried out in each step and results obtained being discussed in the following subsection.

4.2 Implementation of the Proposed Framework and Results

The starting point of this exercise is the realization that Leros Island constitutes an extraordinary and unique example in the Mediterranean Region that disposes historically significant land and maritime as well as tangible and intangible cultural remains of *glocal (global and local) importance*. It is host of a remarkable natural beauty (NATURA 2000 regions and wildlife shelters, landscapes of outstanding beauty and wetlands) and a rich World War II land CH and especially UCH, counting for fourteen well-located sunken ship and plane wrecks in the island's maritime environment, all linked with World War II fatal events.

4.2.1 Vision, Goal, and Objectives

For handling the Leros exquisite cultural wealth toward a cultural tourism perspective, a *vision* is created. As such is perceived the shift of the island's image from a place of isolation, abandonment, underdevelopment, and social banishment to a place of multi-nature, experience-based cultural tourism activities. The *goal* is delineated as the "sustainable and resilient exploitation of natural and cultural, land and underwater, tangible and intangible CH." Furthermore, a number of objectives or priority axes are outlined at this step, emanating from identified key challenges of this particular case study and tracing out key directions for policy action in order for the vision and goal to be reached. These are (Koutsi and Stratigea 2019):

- Designation of local cultural identity as a pillar for sustainable cultural tourism through GIS mapping of natural and cultural resources, and realizing their very essence and value

- Treatment of land CH and UCH in an integrated way, since both are parts of the same narrative, i.e., Italian occupation and World War II fatal events
- Integrated view of natural and cultural resources, co-existing in many parts of the island and enriching the value and experience gained out of them
- Development of alternative, authentic, experience-based, cultural tourism products in alignment with the globally noticeable tourism trends and policy priorities as to the "culture-tourism" complex
- ICT-enabled promotion of land CH and UCH as a key factor for dealing with fragmented and geographically isolated areas, such as the lagging-behind island regions; and providing direct access to specific tourism niches
- Enhancement of local entrepreneurship and creation of value chains for strengthening local economy and boosting extroversion of local authentic cultural tourism products
- Raising awareness of local community on the value of natural and cultural resources, stressing preservation and sustainable exploitation concerns
- Spatially balanced cultural tourism development and removal of internal inequalities by promoting an evenly dispersed cultural tourism pattern

4.2.2 Exploring the External and Internal Environment

Having sketched the vision, goal, and objectives of the Leros planning exercise, a deep insight is acquired with respect to the external and internal (study region) environment. As to the *external environment*, the global tourism market trends from the demand and supply side, cultural heritage preservation policies and international conventions (see subsection 3.1), policies promoting "culture-tourism complex" at the national and European level, regional policies related to developmental aspects of fragmented insular communities, European directions as to the protection of natural resources, sustainability and resilience objectives, etc., are explored. Speaking of the *internal environment*, a thorough analysis of socio-economic, demographic, educational, cultural, environmental, technological, and infrastructural aspects is conducted. The study of both the external and the internal environment has provided the ground for conducting a SWOT analysis of the study region, reflecting the identification of its strong and weak points as well as the way these can be used or improved respectively in order to effectively cope with opportunities and threats of the external environment.

Furthermore, of critical importance at this stage is the use of *GIS technology* for mapping cultural assets that can set the ground for building strategies and effective policies towards specific forms of cultural tourism products and related activities. In the present study, GIS mapping and content creation of cultural (Fig. 4) and natural resources is accomplished, in order for a *twofold goal* to be served, namely, to: provide *geospatial information* as to the distribution of these resources in the land and maritime part of the study area and thus facilitate the planning endeavor; and form the ground for the development of a *Web-GIS platform* and related application

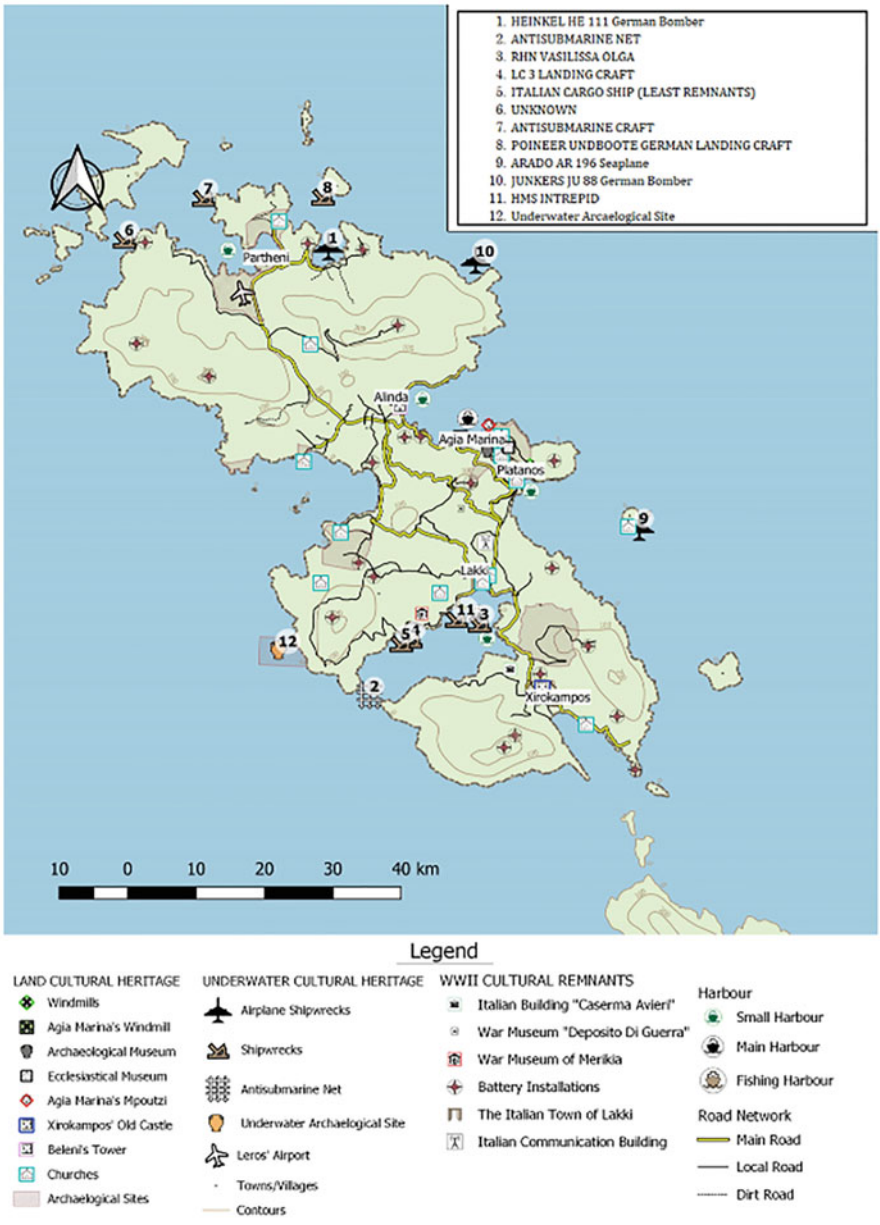

Fig. 4 Leros Island—GIS mapping of cultural resources, Source: Koutsi (2018)

for engaging Leros local community in the assessment and prioritization of planning proposals.

4.2.3 Visioning Alternative Future Trails

Building up the image of an attractive, sustainable, and competitive cultural tourist destination is the outcome of a successful planning endeavor (Hudson et al. 2004). This endeavor aims at capitalizing on local assets, while it also has to promote sustainable and resilient forms of cultural tourism that are both consistent with local aspirations and well-adjusted to global tourism as well as other prevailing trends or policy directions (Stratigea and Katsoni 2015).

In this respect, planning needs to explore a number of strategic policy options ahead that can effectively establish the "link" between the local and the global context, assuring that communities and regions can compete, in a successful way, in the evolving global scene (Stokes and Wechler 1995; David 2003). It also implies a meaningful balance among different stakes and expectations of various stakeholders' groups (Stratigea 2015), while embodying in the planning outcome the current social and environmental concerns, as tourism is an industry heavily capitalizing on nature's endowments and society's cultural heritage (Stokes and Wechler 1995; Cooper 1995).

Based on the previous mentioned work, such a multi-objective balance was sought in Leros case study through the structuring of *alternative scenarios* that constitute a portfolio of possible and plausible future states, fulfilling goals and objectives of the specific study region within different decision environments.

Effort is also placed on the mild exploitation of the valuable local assets, in order for a compromise between their role as a vehicle for local economic development and social cohesion on the one hand; and their protection for serving cultural resilience purposes on the other, to be attained. Finally, special care is also taken for reaching a *spatially balanced exploitation pattern*, fulfilling thus equity developmental aspects and revocation of socio-economic disparities in the study region.

In structuring these scenarios, the *"two uncertainty axes"* scenario building methodology was applied (Jäger et al. 2007). As key uncertainty axes were perceived the (Koutsi and Stratigea 2019) (Fig. 4):

- *Spatial pattern* of cultural tourism development, hypothesizing either a concentrated or a de-concentrated spatial pattern.
- *Thematic approach* of scenarios, being either *mono-thematic*, exclusively linking the island's cultural tourism narrative to World War II events and remains, i.e., building up a 'story' that presents the region's specialization in World War II cultural heritage or battlefield tourism; or *multi-thematic*, integrating multiple cultural heritage themes inherent in Leros Island, which represent the multifarious past of the island—various occupations through time—and reveal trails left in the built and social environment.

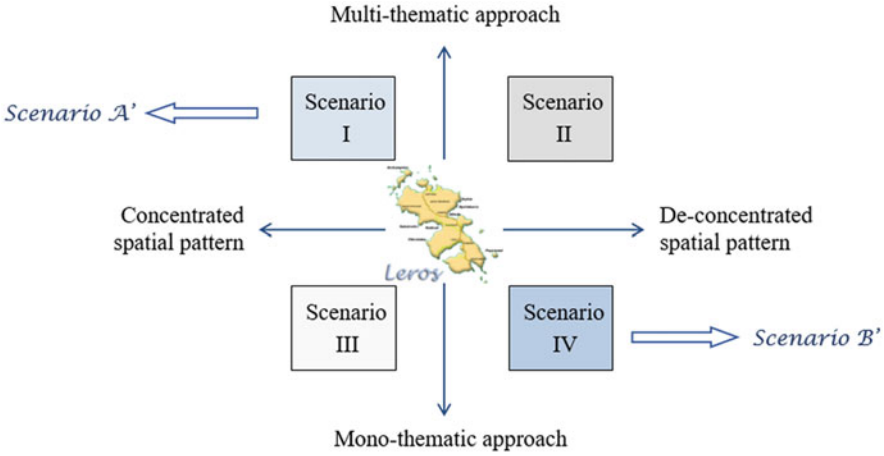

Fig. 5 "Two uncertainty axes" scenario building approach for exploring potential future trails of cultural tourism development in Leros Island. Source: Koutsi and Stratigea (2019)

In a rough pre-evaluation of the four distinct future images of Fig. 5 on the basis of a range of criteria (e.g., competitiveness of Leros in the Dodecanese islands' complex, relevance of cultural resources to World War II, spatial distribution of cultural resources in land and maritime regions, rising trends toward maritime cultural and/or diving tourism, to name a few), it seems that scenarios I and IV take precedence and are selected for further specialization as the most challenging and relevant options for Leros region. Based on this scenarios' choice, the spatial deployment and the respective narratives accompanying them are shortly outlined. For simplicity reasons, in the following text, Scenario I is referred to as Scenario A' and Scenario IV as Scenario B′.

4.2.4 Scenario A': "Leros: From a 'Soul-House' to a Place of Multiple-Opportunities"

The scope of Scenario A' is to shift the image of Leros from a "Soul House" to a place of multiple opportunities. This is to be achieved by a *multi-thematic, spatially concentrated model* of future cultural tourism development, with emphasis on balanced, heritage-led, local development concerns. As to its spatial formulation, a *polycentric spatial deployment* is predicted by establishing *four distinct nodes*, evenly dispersed throughout Leros Island (Fig. 6). Each of them bears a specific cultural identity, thus sending out positive development impulses to its areas of influence. The scenario follows a *multi-thematic* cultural tourism development perspective integrating, in a structured way, aspects of the strong World War II cultural heritage message into other important natural and cultural attributes of the study area. Each of the four prevailing nodes, i.e., "vehicles" for spreading cultural development in their surrounding spatial entities, is crosscut by respective *cultural*

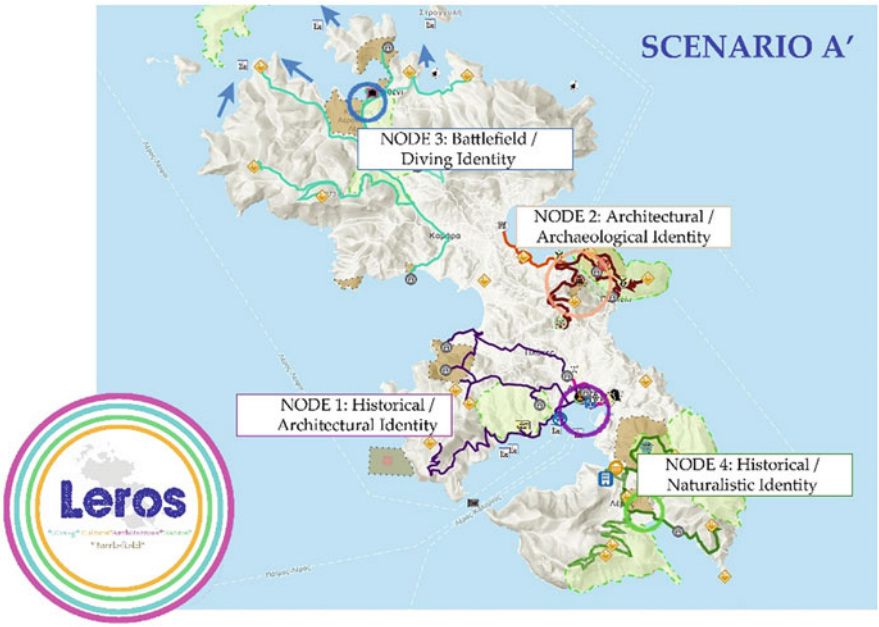

Fig. 6 Narrative and spatial delineation of cultural tourism development in Scenario A'—Four cultural tourism nodes and related routes surrounding each node. Source: Koutsi (2018); Koutsi and Stratigea (2019)

routes, each of which links and promotes tangible and intangible cultural heritage attributes of both land and underwater parts of the island. Scenario A' promotes a *variety of alternative tourism forms*, such as religious tourism, nature tourism, cultural tourism, diving tourism, etc., thus opening up a range of cultural tourism opportunities and providing the chance to encounter a wide range of diversified cultural tourism experiences.

4.2.5 Scenario B′: "Leros: An 'Open Museum' of the European Cultural Heritage and Identity"

In Scenario B′ (Fig. 7), a mono-thematic approach is adopted, having as prevailing feature the Italian occupation (1912–1943) and the World War II historical events. This choice is grounded on the strong and decisive influence these have had on the socio-cultural, economic, and spatial development of the island through time and the important remains of this period in both the land and marine environment, witnessing trails of the foreign occupation, important military actions of the European but also global history, and, ultimately, the confrontation of different political ideologies and civilizations on the land of Leros.

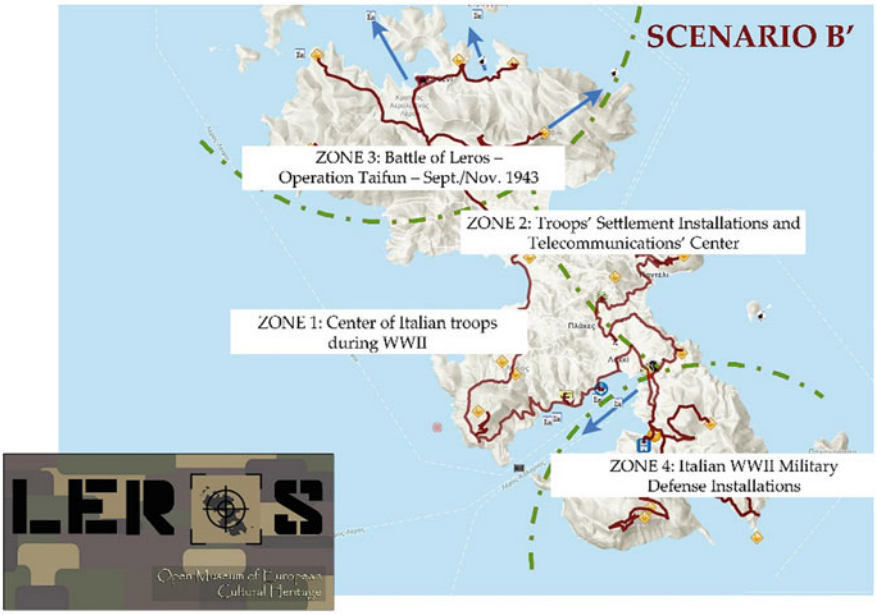

Fig. 7 Narrative and spatial delineation of future cultural tourism development in Scenario B′—Zones (green intermittent lines) and the Unified Cultural Route (continuous dark red line) crossing Leros as a whole. Source: Koutsi (2018); Koutsi and Stratigea (2019)

Sustainable and resilient exploitation of these tangible and intangible land and maritime World War II cultural remains attempts to place Leros in the rapidly evolving geography of "Battlefield/Dark" tourism destinations, a remarkable node in the Aegean, but also in the Mediterranean Region and Europe as well. The narrative of Scenario B′ has at its heart the development of Leros as an 'Open Museum' of the European Cultural Heritage and Identity. This 'Open Museum' tale is realized through the establishment of a 'History and Culture Route' which traverses the island as a whole, both in the land and maritime environment; incorporates particular locations and places, where historical facts took place; and represents a painful but also constructive trajectory of Leros Island per se, and a "lessons learnt" footprint of the European and world's history. In such a context, the area of the island was divided into four distinct zones, which comply with the narrative of the island's history (Fig. 7).

4.2.6 Building Consensus: Community Engagement

Building consensus or more specifically rating scenarios' preferences and priority axes for reaching the vision is pursued at this stage by engaging Leros community through digitally enabled interaction. In support of this e-participatory assessment

process, a Web-GIS application was deployed (Koutsi 2018) by the use of the ESRI Story Maps, complemented also by its counterpart mobile phone application for further impacting community engagement. This aimed at fully delineating the scenarios' narratives, the natural and cultural resources addressed to each narrative (e.g., location, type, content), and the way these resources were integrated into cultural tourism nodes and routes.

Members of the Leros community were invited to use the Web-GIS application and, by means of an online questionnaire (Google Docs' form), express their views with respect to the: assessment of the current state of the island's cultural development; rating of preferences as to the proposed scenarios; selection of most relevant priority axes (selection of three out of the eight proposed) for implementing the proposed scenarios; suggestion of scenarios and related narratives' improvements.

Promotion actions notifying local community of the Leros cultural planning exercise and Web-GIS application and attracting people to engage incorporated targeted communication through cultural associations, local press (E-Leros and Leros news), diving schools, and travel agencies; but also a campaign through Facebook and Instagram, addressing an audience that fulfilled certain criteria, namely: being residents of Leros Island or persons originated from there, falling into the 18-65+ age groups, and being interested in themes associated with World War II, diving, Leros island, cultural tourism, wrecks, tourism, Aegean Sea islands, and/or alternative tourism.

The online questionnaire was available for three months (June to August 2018), while the targeted campaign through Facebook and Instagram was carried out for the time span 17 June–17 August 2018 and attracted 799 interactions/likes and 8038 views. Out of this Web interaction, *204 questionnaires* were reaped, a crop that was perceived as satisfactory, taking into consideration the profile of population of the study region, i.e., educational and communication skills as well as experience in relevant e-participation endeavors.

Respondents' gender profile was balanced, both in total and within age groups considered, with a slight precedence of women (54%). The majority of respondents fell into the 18–35 (52%) and 36–50 (30%) age groups that exhibit a greater familiarization and skills for handling internet applications and social media. People engaged had a high (57% possess PhD, MSc, or University Degree) or medium educational profile (42% are high or technical school graduates), while 11% of respondents were unemployed and 9.8% university students.

As far as the very essence of responses is concerned, this sums up as follows (Koutsi 2018; Koutsi and Stratigea 2019):

- A large share of respondents perceived land and underwater cultural resources in Leros Island as largely underexploited.
- Respondents realized the uniqueness of the island's World War II cultural heritage and its potential for serving sustainable local development and cultural tourism objectives; while they also pointed out the need for a more systematic and integrated cultural tourism planning approach, addressing long-term prosperity objectives of the region in a sustainable and resilient way.

- Respondents appraised the narrative presented by Scenario B′—a narrative of local but also European and global reach—as more relevant and one sustaining a unique identity and a competitive advantage of this small island in the Aegean Sea; while revealing the value attached by the local community to World War II events and their remnants, sealing the "body" (land and maritime), the history, and the people of Leros in the past and present, and eventually in the future, in case this plan is successfully implemented.
- Highest precedence was given to three priority axes, namely, "designation of local cultural identity as a pillar for economic development and social cohesion," "development of alternative, experience-based, cultural tourism products," and "balanced cultural tourism development for removing local inequalities."
- Finally, of great importance were replies of people in the open question, requesting proposals for improvement of the designed narratives. These, although small in number (nine replies), have revealed the passion of people for their history, identity, and values and their concern for keeping them alive for the future generations.

4.2.7 Reaching the Vision

Based on the outcomes of the e-participatory process, a Heritage-Led Local Development Plan was developed, accompanied with a policy path, i.e., a set of policy directions, measures, and targeted policy actions for implementing this plan. This policy path aims at achieving a sustainable, integrated, durable, and innovative exploitation of available natural and cultural resources, while also coping with obstacles imposed by the geographical and social isolation of Leros Island.

5 Conclusions

"Culture is the fountain of our progress and creativity" (von Droste 2012:14). This wording unveils the outstanding importance of cultural heritage for the global community and the obligation to handle it with discretion and in a sustainable and resilient way so that the messages this carries to remain intact and be successfully handed out to future generations. It also reveals, in a rather unconditional way, that concern should be addressed to both tangible and intangible, in land or submerged, cultural and natural elements of this heritage, considering these as: indispensable parts of keeping spiritual values, identity, tradition, and memory; and a motor for promoting creativity and progress. This statement becomes extremely important in times of globalization that favor branding and cultural standardization, within which cultural heritage is becoming a pillar for keeping alive *identity*, *historical memory*, and *roots* of local communities.

Concurrently, cultural heritage is perceived as a valuable resource and a bedrock for *sustainable & resilient urban and regional development*. This is largely

grounded on the integration of culture with tourism—the culture-tourism complex—and is justified by the noticeable global tourist trend towards the "consumption" of authentic cultural and aesthetic products. Such a development perspective has fueled a *"cultural turn"* of cities and peripheral regions; and has recently attracted planners and policy makers' attention in seeking *place- and people-centered options and policy paths* for exploiting cultural assets in a *sustainable, durable, creative and resilient way*. This cultural turn and related focus on cultural tourism planning endeavors embeds cultural resources as an integral part in the way planners and policy makers evaluate the past and plan for the future. It thus renders culture an overarching and underpinning aspect for durable heritage-led development that is enriched by *intrinsic spiritual and unique values* of *societal knowledge* and *identity*. Additionally, it initiates lasting improvements in cities and communities by transforming, in a sustainable and resilient way, cultural heritage assets into market-driven commodities, with multiple benefits that touch upon the economic, the social, the spatial and the individual realm.

The evolving planning repertoire arms nowadays planners with appropriate means for effectively realizing this turn, i.e., tools and approaches needed to shift to more community- and place-based strategic and participatory planning endeavors when dealing with cultural resource management issues. This is a promising advancement, taking into consideration the peculiarities of each single study region; the vulnerability of these resources in a turbulent and unstable environment, calling for more long-term planning approaches; and the necessity to grasp the relevance of cultural heritage for society.

In the cultural wealthy Mediterranean islands, rating though high as to a variety of risks, e.g., climate change impacts, loss of biodiversity, urbanization, and immigration, to name a few, sustainable and resilient exploitation of tangible and intangible, land CH and exceptional UCH is of major importance in seeking to weaken insularity bottlenecks and pursue long-term prosperity objectives. The proposed methodological approach addresses these concerns and attempts to establish a mutual learning platform for all three planning counterparts, namely, planners, decision makers, and local population; while it also increases cultural resource awareness and responsibility of local population. By integrating current planning streams with powerful and limitless ICT-enabled tools, such as Web-GIS and social networks, communication of cultural planning outcomes to a large audience is achieved; and an interaction is established that allows local 'flavor' to be embedded in technically prescribed planning outcomes. Empirical results of this effort in Leros case study, though reflecting that part of population that disposed the necessary skills, indicate that the new, mature and of low cost, ICT and Web 2.0 arsenal and related applications need to be factored into cultural heritage management and interpretation, provided that digital readiness of island communities is improved. However, the experience of authors shows that precedence of face-to-face interaction can further improve e-engagement results, being a prerequisite in order for trust, necessary for people to engage, to be established. Worth noting is also the eagerness of those engaged to become agents of change of Leros destiny, challenging insularity drawbacks and using heritage as their own single "weapon."

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