Article

Sustainable and Resilient Management of Underwater Cultural Heritage (UCH) in Remote Mediterranean Islands: A Methodological Framework

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Abstract: The impacts of mass tourism and COVID-19 crisis demonstrate the need for healthy, peaceful, and authentic recreation options, giving prominence to emerging destinations, such as remote Mediterranean islands. These, although endowed with exquisite land and underwater cultural heritage (UCH), are confronted with insularity drawbacks. However, the exceptional land and especially UCH, and the alternative tourism forms these can sustain, e.g., diving tourism, are highly acknowledged. The focus of this paper is on the power of participation and participatory planning in pursuing UCH preservation and sustainable management as a means for heritage-led local development in remote insular regions. Towards this end, the linkages between participation and (U)CH management from a policy perspective—i.e., the global and European policy scenery—and a conceptual one—cultural heritage cycle vs. planning cycle—are firstly explored. These, coupled with the potential offered by ICT-enabled participation, establish a framework for respective participatory cultural planning studies. This framework is validated in Leros Island, Greece, based on previous research conducted in this distinguishable insular territory and WWII battlefield scenery. The policy and conceptual considerations of this work, enriched by Leros evidence-based results, set the ground for featuring new, qualitative and extrovert, human-centric and heritage-led, developmental trails in remote insular communities.

Keywords: Mediterranean island regions; underwater cultural heritage (UCH); heritage-led local development; participatory (e-)planning; social networks

1. Introduction

Although sustainability and resilience have been extensively discussed during the last decades with great focus on environmental concerns, they have gained remarkable attention during the COVID-19 global pandemic [1]. This is due to the devastating COVID-19 health, social, economic, political, etc., repercussions on the one hand; and the slowdown of the progress on sustainability, as well as the lowering of priority attached to the United Nations' Sustainable Development Goals (SDGs) on a global scale on the other [2,3]. Due to this new health-related threat, issues such as proactive planning, resilience, capacity for crisis management, collaborative action, and readiness of local communities, local/regional, and national governments, but also of economic sectors, have arisen, as proper means for effectively confronting with emerging, unexpected, and highly destructive crises and their multi-level consequences.

When comparing economic sectors, *tourism* seems to be one immensely affected by COVID-19 pandemic [4–7], with unprecedented effects on employment, local entrepreneurship, as well as regional and national economies [8]. This is due to the fact that the tourism sector is strongly associated with—largely banned or restricted in the COVID-19 era—social gathering, as well as national and international mobility for recreation, entertainment, and

cultural visits [9]. In fact, tourism, as a quite extroverted and, thus, vulnerable to external challenges and threats sector, has been historically subjected to various crises, with the most significant of them focusing on security and health incidents [10]. However, as evidence shows [8], COVID-19 appears to be the most pronounced and catastrophic event in the history of the tourism sector.

Crises that challenge the tourism sector cause *multiplying implications* to society and the economy; and at multiple spatial levels, ranging from the local and regional level to the national and global one. In fact, tourism is, so far, strongly interwoven with economic growth. Balaguer and Cantavella-Jorda [11] have convincingly articulated this view by means of the *tourism-led growth (TLG) statement*. Based on this statement, decline in tourism has severe implications to the economies of both the local destinations and the nations as a whole. The economies of the Mediterranean tourist destinations, and their respective states, are typical examples of TLG; and, consequently, are suffering a huge retreat of their economies due to COVID-19. Coping with such consequences in the new global environment, shaped by the emergence of COVID-19, means that destinations and tourist entrepreneurship, but also nations, are forced to *rethink, reorient, and redesign* their policies, tourism products, and services. Such a policy re-orientation will allow adjustment to the evolving pandemic scenery and ensure the revival of the sector to the benefit of economic growth, employment (tourism is a labor-intensive industry), as well as social and economic cohesion.

The COVID-19 health crisis has, overall, revealed the insurmountable need for tourism—as a sector highly vulnerable to external crises, especially to security and health ones—to establish a new, more *sustainable and resilient*, profile [8]. It has also shown the necessity to transform from the highly prohibitive, owing to COVID-19, mass and overcrowded, spatially-concentrated pattern to a less crowded, milder and resilient, more spatially dispersed and secure one, mitigating the health concerns intensified by COVID-19. Additionally, as Benjamin et al. [12] (p. 476) claim, " ... *a resilient post-pandemic tourism must be more equitable and just, in terms of how it operates, its effects on people and place* ... ". Sharma et al. [7] also state that COVID-19 challenges can further sustain eco-tourism and other alternative tourism forms. The OECD [8] leans towards this conclusion by claiming that natural and cultural attractions in local and regional destinations are expected to drive the recovery of the tourism sector. It also points out that a 'Business-as-Usual' rebranding effort of the tourism sector will be ineffective if the structural changes that need to be in place post-COVID-19 are overlooked.

Within the evolving tourism landscape, and with the expressed need for the transformation of the tourist sector, new, previously neglected, local tourism destinations can be brought to the forefront. These, although highly attractive in terms of their tangible and intangible assets, have up to now failed to become an essential player in the tourism game. On the contrary, they are the 'victims' of the overcrowded, well-established, and highly reputed destinations of the pre-pandemic era. The latter have monopolized the tourism market, while, additionally, playing a critical role in perpetuating spatial inequalities.

Speaking of such newly emerging, peaceful, and safe destinations, the way these can be planned in order to fulfill, concurrently, sustainability and resilience, but also social and environmental justice, objectives, constitutes a critical issue. This calls for *planning and policy decisions* that are in alignment with local expectations and visions; while they also establish mild, attractive, and safe destinations for their visitors. Taking into account the implications of climate change and globalization as important key drivers of the external pre-pandemic decision environment, but also the new COVID-19-related conditions that reframe this environment, such decisions need to (Figure 1):

- Ensure *sustainable local development* by safeguarding tangible and intangible, assets and supporting equitable local tourism trails [12];
- Broaden *resilience* of local destinations to external crises;

- Feature *sustainable tourism patterns* by promoting environmentally-, culturally-, and socially-responsible decision-making [13], thus spreading positive impulses to local employment and income; and, most importantly
- Engage local societal groups and stakeholders in decision-making processes in order for such a sustainable and resilient tourism development pattern to be collaboratively featured [12,14].

Figure 1. Objectives that need to be pursued by local tourism destinations in a challenging era, Source: adapted from [7].

Such a tourism development pathway and the blossoming of *alternative tourism destinations*, however, are not new concepts in the field. In fact, demand for authentic, more personalized, and experience-based tourism preferences [15–17], served by means of alternative and special forms of tourism, is already noticed as a trend, and is motivating a relevant response from the supply side. Additionally, this trend, both on the demand and the supply side, appears to steadily escalate in the global tourism market and, as various researchers claim, is capable of serving long term sustainability goals [16,18–20].

In the post-COVID-19 era, such a tourism development direction also constitutes a challenging option and, eventually, requires a "reboot" of the tourism sector in order to surpass the weaknesses of the mass tourism model and its prohibitive restrictions in the COVID-19 context. Such an option is justified by the very nature of alternative tourism forms, as this was previously articulated by Ranck [21], namely the: smaller scale; more responsible exploitation of local resources, impeding undesirable impacts; low economic leakages; more adjustable to local societal and cultural profiles; to name but a few. Additionally, the newer trend in tourism demand, dictating the strong intertwining of visitors with the local spirit and the tangible and intangible natural and cultural assets of local destinations [22–24], should also be integrated to the above attributes. This growing trend is also supported by Andriotis and Agiomirgianakis [25], stressing the exceptional role of the local host community as a key driver in such alternative local tourist destinations. Finally, the option of alternative tourism can better serve COVID-19 health-related concerns, which currently constitute a critical issue in both the demand and the supply side.

Distinct emphasis, in the context of the alternative tourism model, is also placed on *heritage aspects* of local destinations, both tangible and intangible, natural or cultural, on land or underwater. This dowry is grasped as playing a prominent role in local tourism destinations, acting beneficially for locals, through strengthening local identities and sense of belonging, increasing their awareness on the value of this heritage and the need to exploit it in a sustainable way; and visitors, enjoying authentic experiences in safe environments, while establishing intercultural understanding and strong bonds with respective localities and indigenous communities [26,27].

Remote, peripheral, small and medium-sized *islands* in the Mediterranean region are distinguishable examples of heritage endowed places. They possess a rich, land-based cultural heritage (CH) in general, and underwater cultural heritage (UCH) in particular (in the rest of this paper, CH abbreviation refers to the land-based cultural heritage, UCH to the underwater one, while reference to the combination of both—i.e., land and maritime cultural heritage—is marked as (U)CH. In fact, for these islands, (U)CH constitutes a valuable asset and a comparative advantage for shifting these regions to sustainable and resilient, heritage-led, alternative tourism destinations. Both land and underwater cultural heritage, detected in a number of these islands, is largely connected to historical events of European, or even global, reach, but also local history, social and cultural trajectory through time. This heritage incorporates remnants of cities and civilizations, sites of archaeological

interest, sunk martial equipment, ancient harbors, and ship or plane wrecks that are associated with important historical or war events, e.g., World War I and II [28]. In reference to the UCH in particular, such places can have a prominent position as, e.g., attractive diving cultural tourism destinations. In fact, several coastal and insular regions of the Mediterranean seem to be already highly reputed diving tourism destinations, especially due to the existence of remarkable WWI and II UCH remnants. However, despite the fact that many UCH sites are already exploited, the majority of them remain unknown, unexplored, not yet fully documented, and largely unprotected [29]. This situation seems, nowadays, to be gradually reversing. Additionally, the developmental potential of UCH appears to gain interest from various disciplines, including land and maritime spatial planning. The sustainable exploitation of these heritage elements to the benefit of local, but also regional and national, development presupposes the documentation, protection, preservation, and management of the tangible and intangible nature of UCH by means of an integrated and participatory planning approach, founded on the needs and aspirations of local communities [30,31].

Based on the aforementioned discussion, and the newly emerging tourism landscape due to the pandemic crisis, the focus of this paper is on methodological concerns for successfully promoting engagement of local communities in planning heritage-led developmental trails. Such trails are grounded on the sustainable and resilient exploitation of both CH and UCH. (U)CH in this respect is perceived as a precious resource and a bedrock for heritage-led local tourism development. Such a development perspective exploits this heritage in a respectful, locally-adjusted and human-centric, and, most importantly, collaborative planning approach. Leros Island, Greece, i.e., a remote, insular region, lagging behind others, is used as a case study in this research work.

The structure of the paper has as follows: in Section 2, the current global and European decision environment is presented, with specific reference to those policy frameworks that indulge in sustainable (U)CH management as a multi-sectoral, multi-level, and multi-stakeholders' planning issue; and, most importantly, establish linkages between (U)CH management and stakeholders' engagement for achieving sustainable and resilient heritage-led local development. In Section 3, a deeper insight is provided into the issue of stakeholders' engagement in (U)CH management for heritage-led local development, by conceptualizing the linkages among the cultural heritage cycle, the planning cycle, and public participation. Section 4 attempts to critically comment on methodological concerns, as well as emerging issues and barriers in conducting participatory approaches for planning heritage-led local development in remote lagging-behind insular regions. Towards this end, the results obtained from the specific Leros Island case study are critically discussed and interpreted, following the rationale of the policy and conceptual ground of Sections 2 and 3, respectively. Finally, in Section 5 some conclusions and future research concerns are drawn.

2. Setting the Scene for Stakeholders' Engagement in (U)CH Management—The Policy Context

Managing CH in general and UCH in particular is definitely a quite complex and multi-/inter-disciplinary task [29] that needs to be addressed within different spatial levels, i.e., beyond the pure location of a certain relic. In this respect, such a management has to be placed in the local, regional, national, as well as the international policy context. Handling CH, and especially UCH, at each distinct level entails different challenges, objectives, as well as constraints.

Regarding the UCH in particular, according to a statement of UNESCO [32], its successful management implies consideration of several factors. These, for instance, incorporate different cultural heritage resources (known, unknown, and future); threats menacing UCH per se but also its surrounding environment; conflicts of interests among a variety of stakeholders, who have a stake with regard to the sustainable exploitation of this heritage; to name but a few. Managing UCH, in such a context, is about:

- Gathering multi-level, multi-objective, and multi-stakeholders' information;

- Placing this information within the frame and priorities of the international, European, national, and regional or local level; and
- Making well-documented decisions that are grounded on the aforementioned information and are framed by relevant policy directions and constraints.

Following this discussion, UCH management seems to be, respectively, a multi-level, multi-sectoral, and multi-stakeholders' issue [33], affected by but also influencing activities in the maritime, coastal, and land environment. This unveils the unique connection of UCH to both the tangible and intangible aspects of its natural environment and the surrounding area.

Needs, opportunities, guidelines, and goals for UCH preservation and protection are defined by the, already articulated, policy framework at various policy levels, i.e., the international, European, and national or regional. Additionally, it is further enriched or complemented by sectoral policy directions on related topics, e.g., maritime, cultural, environmental, social, and tourism.

By recognizing *stakeholders' engagement* and *awareness raising* as key drivers for a successful UCH sustainable exploitation and management; and having as a spatial focus the Mediterranean Region, relevant directions of selected policy documents, that emanate from the international, European, and Mediterranean level, are briefly presented in the following paragraphs. Emphasis, in this respect, is placed on the role of stakeholders' engagement in managing UCH for heritage-led local development purposes. Such a discussion attempts to delineate strategic policy directions that stem from the external decision environment; and use them for framing policy choices as to the UCH-enabled sustainable development in case of, e.g., remote Mediterranean islands.

2.1. The International Context

At this policy level, UNESCO has the leading role as to the UCH management and preservation directions. More specifically, the 2001 UNESCO Convention [28] for UCH Protection features the UCH protection regime and delineates the necessary assessment criteria and directions, demarcating those UCH assets that are worth to be placed under a UNESCO preservation status by member states. According to Article 1 of this Convention, " ... *Underwater cultural heritage means all traces of human existence having a cultural, historical or archaeological character which have been partially or totally under water, periodically or continuously, for at least 100 years*" [28] (Article 1). This definition, however, excludes from the relevant assessment several criteria that are linked to the very nature of UCH. It also precludes UCH assets with significant recognition in the global history, such as the WWII shipwrecks, from being placed under the UNESCO preservation status. Therefore, important issues are raised as to the actual preservation status of such UCH [31]. Additionally, an active stakeholders' role is not actually prescribed in this policy document, since this mainly represents a call for action addressed at the national level. As such, it constitutes an inspiring text, aiming to activate member states towards the protection and sustainable exploitation of UCH. However, a passive role of *stakeholders' engagement* is crudely predicted in Article 20 by designating the need for raising public awareness. This renders stakeholders and the public the recipients of information by the state parties as to the value and significance of UCH protection and preservation.

2.2. The European Context

Europe has a long history in delivering strategic policy directions regarding the protection and preservation of CH in general, as well as the marine environment and the UCH in particular. For the purposes of this research work, a range of relevant European policies are shortly presented in the following (Figure 2), with special focus on the role these attach to *public engagement* in managing (U)CH. These policies, as part of the external decision environment pertinent to the European level, can frame or encourage, or even constrain, decision-making processes with regard to the sustainable exploitation of (U)CH, when seeking to achieve future heritage-led local development pathways.
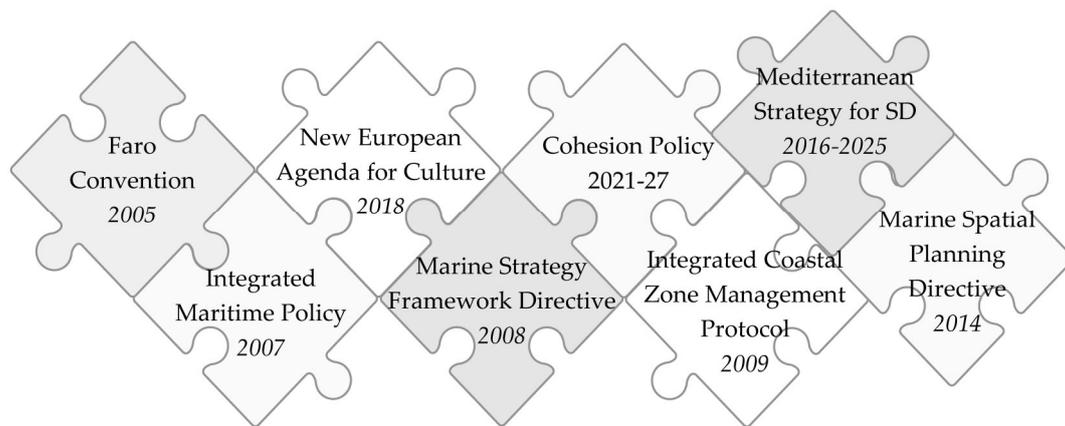
Figure 2. The European policy framework—Policy guidelines in support of (U)CH preservation/protection with particular reference to public engagement, Source: own elaboration.

The Convention on the Value of Cultural Heritage (CH) for Society [34] is a policy document of critical importance in this respect. In this Convention, the special bond between CH and local communities is highlighted; while the distinguishable role of culture as a valuable resource in seeking sustainable local development objectives is also stressed. The need to involve every societal actor in the ongoing process of defining and managing CH is taken for granted in this Convention. More specifically, in Article 1 CH management is perceived as an individual and collective responsibility. This implicitly defines local societies and stakeholders' groups as safeguards of their CH; while linking CH conservation and sustainable exploitation with human development and quality of life. The role of CH as the vehicle for a peaceful and democratic society; and the value of a wider cooperation among public, institutional, and private actors for establishing greater synergy of competencies are also highlighted in Article 1. Article 5 supports the establishment of favorable economic and social conditions that encourage participation in cultural heritage management, placing at the same time CH protection at the heart of sustainable development objectives. The latter is also supported in Articles 8 and 10 of the Convention, unfolding: (i) the role of (U)CH as a critical resource in the effort to achieve economic, political, social, and cultural developmental objectives; and (ii) the need to set (U)CH within the broader cultural, biological, geological, and landscape context, by adopting an integrated approach. In Article 12, the overarching goal for democratic participation is presented, aiming at encouraging engagement of all interested stakeholders in the process of identification, study, interpretation, protection, conservation, and promotion of (U)CH. Such an engagement is grasped as a means for featuring effective (U)CH policy action that is in alignment with values attached to it by each single community group.

The decisive role of culture as a key driver for sustainable development; and an engine for pushing forward inclusiveness and social fairness, creativity, and employment in Europe as a whole, is marked in the New European Agenda for Culture [35]. Such a role is justified by the strong and highly diversified cultural identity of the European territory. More specifically, this agenda takes the stand that culture is a factor that can feature a *sense of identity and belonging*. As such, it constitutes a strong motive for active engagement, sharing of common values, inclusion, and intercultural dialogue across Europe and the globe. Additionally, culture is perceived as a means for alleviating various types of community divides, e.g., social, religious, political; rendering *cultural participation* an issue of distinguished concern and a specific strategic target with respect to the social dimension at the European level. Bottom–up processes, harnessing the social but also the economic added value of culture, are stressed in this Agenda, illuminating issues *of cultural governance* and targeting to establish a structured dialogue with civic society. Such processes are combined with top–down initiatives, endorsed by the European Union, its member states and cultural organizations. UCH, as a distinct part of the European cultural

heritage, is considered to be an important asset for sustainable development; and a pillar for the coastal and maritime tourism sector. As such, it is expected to be strongly affected by the above-mentioned bottom–up and top–down processes; while also broadening UCH value, protection, preservation, and developmental role in less-privileged coastal and insular regions of the European community.

The objectives articulated in the New European Agenda for Culture and the role attached to CH in general for the sustainable future development of Europe seem to be further reinforced by the policy objectives articulated in the Cohesion Policy 2021–2027 [36]. More specifically, Objective 1 of the cohesion policy on a "more competitive and smarter Europe" fits perfectly with the distinct identity and richness of the European (U)CH as a means for steering Europe's competitiveness; while smart technologies and their applications seem to rapidly permeate the (U)CH sectors for serving a variety of goals, e.g., recording, preserving, visualizing, archiving, and marketing. Objective 2 on "a greener, low-carbon transitioning towards a net zero carbon economy" seems also to be in alignment with a heritage-led developmental trail, i.e., a less overcrowded and resource-intensive model, especially in case of the less-privileged European territories. This perspective can have a positive outcome in Objective 4 as well, targeting a "more social and inclusive Europe". Objective 4 can also be accomplished by taking into consideration the power of (U)CH as a conflicts' alleviating factor among the civic societal groups. Objective 5 of the cohesion policy on "A Europe closer to citizens, by supporting locally-led development strategies and sustainable urban development across the EU" is of critical importance for public engagement towards heritage-led future development trails of lagging-behind European regions. This objective gives prominence to public engagement as a powerful approach in steering inclusive and cohesive societies, especially when it comes to heritage-led urban and regional development plans. Finally, Objective 3 on "a more connected Europe by enhancing mobility" is clearly expected to improve accessibility conditions of remote, less-privileged regions; and, thus, broaden effectiveness of their efforts to sustain (U)CH-enabled future developmental paths. The simplified rules and the greater empowerment of local, urban and territorial authorities in managing cohesion policy funds 2021–2027 seems to be in the same direction with the above discussion and the support of bottom-up approaches for reaching objectives set in this planning period by all.

The rapid coastal urbanization phenomenon and the high concentration of land and maritime activities in coastal areas is a remarkable trend of recent decades in the European Union (EU), especially in the Mediterranean region [37–40]. This trend is, nowadays, further intensified by the ongoing interest of the EU in sea-related activities. Such an interest results in a more intensive use of the marine environment by multiple stakeholders [41], who struggle to acquire their own slot in the gradually crowded land of water. The above trends bring to the forefront the need to set up policies that target the sustainable management of coastal and maritime resources in the EU [33,42]. Such policies are briefly presented in the following, with a special emphasis on their *public engagement part*.

The Integrated Maritime Policy (IMP) [43] of the EU reflects an effort to encourage but also streamline the rising multi-sectoral interest in the exploitation of coastal and maritime resources. It seeks to establish a more integrated approach to maritime issues, stressing the need to increase coordination between different policy areas and stakeholders. As Koivurova [44] claims, IMP is perceived as the most comprehensive policy in the history of EU, crosscutting and integrating a range of policy areas with the aim to coordinate action at the EU level. The decision-making framework in maritime affairs calls for a more collaborative and integrated approach, stressing the importance of close collaboration with interested stakeholders in a consultation role. Member states are invited to develop national maritime policies, working close with relevant stakeholders, especially those related to the coastal regions as the mostly affected by any kind of policy decision planned to apply to the maritime environment.

The marine environment is a precious heritage of the European community that needs to be protected, preserved and restored. Towards this end, the Marine Strategy Framework

Directive (MSFD) [45], articulated in 2008, aims at establishing an environmental pillar for the future EU maritime policy. MSFD follows an adaptive management approach, implemented through marine strategies to be reviewed every six years [46]. It is actually grasped as a flagship initiative [47] that is designed to provide guidance to member states towards the adoption of an integrated view and strategy for sustainably exploiting maritime resources; while ensuring conservation of marine ecosystems. *Public participation* plays a key role in this directive as a means for guaranteeing policy buy-in. The participatory dimension of this directive is expressed in par. 36 of the preamble, adumbrating the prerequisites for the establishment of essential participation and increase in stakeholders' knowledge stock. Furthermore, Article 19:1 states that public and stakeholders engaged should be provided with '*early and effective opportunities to participate*' in the implementation of the directive. Directions for participation claim the: active involvement in all aspects of the implementation of the directive and at all scales (marine region scale and national level); consultation at all steps of the planning process; and access to background information. The participatory process introduced by this directive contributes to the maturing of public engagement practices in managing maritime issues. Furthermore, it frames efforts of peripheral and lagging-behind islands of the Mediterranean region towards sustainably exploiting the abundance of precious and of global value UCH, lying at the bottom of the Mediterranean Sea.

Concern about managing the coastal zones that surround the Mediterranean Sea is increasing through time. This is mainly due to the degradation of their current state in many respects, but also the multiple challenges ahead and the pressures exerted on the social, economic, cultural, and environmental dimensions of these zones. Such pressures are associated with the rapid urbanization and coastalization [37,40], overtourism [48], geopolitical tensions [49], and migration, climate change, and sea level rise [50], to name but a few. These are largely threatening, among others, the common and quite fragile natural and cultural, on land or underwater, heritage of these zones, i.e., the assets that set the ground for the survival and flourishing of Mediterranean communities. (U)CH and its surrounding natural environment (should) constitute an important part of integrated coastal zone management (ICZM) [51]. However, very little literature addresses the linkages of ICZM and (U)CH [52,53]. The importance of the coastal zone and its inherent land and maritime heritage, as well as the need to promote cooperative efforts towards its protection, has motivated the EU to ratify the Protocol on Integrated Coastal Zone Management (ICZM) of the Barcelona Convention in the Mediterranean [54]. This protocol is the first legal instrument of that kind, dedicated to steering shared action in order for sustainability objectives of coastal zones in the Mediterranean to be attained [55]. Although not yet implemented or ratified by all Mediterranean countries, it constitutes a precious framework for managing scarce and fragile coastal resources. The value of *public engagement* in implementing this protocol is stressed by various international studies [53,56,57]. This is also noticed as a general principle of ICZM in Article 6, par. (d) of the protocol. Specific references to public engagement are also provided in: (i) Article 7, dealing with the coordination of institutions or organizations having a stake or a 'saying' in both the marine and the land parts of coastal zones; (ii) Article 12 and 13, dedicated to islands and (U)CH management, respectively; and (iii) Article 14, purely dedicated to the concept of public engagement in conducting ICZM studies. In fact, effective implementation of the ICZM Protocol is grounded on a wide public engagement, bringing on board all societal actors who activate in the coastal zone. As such are perceived civil societal groups, stakeholders from various sectors, as well as governmental and decision-making institutions. Good communication, open access to information, as well as collaborative and transparent decision-making processes, coupled with a steady and firm effort towards awareness raising on ICZM issues, are perceived as key enablers to this engagement.

Spatio-temporal impacts of the steadily escalating human activities in the marine environment cause severe deterioration of its attributes and ecosystems, reducing, thus, their ability to provide ecosystem services [58]. Additionally, conflicts are created among

competing uses that need to be properly handled [59]. These call for a more integrated and multi-sectoral approach in planning the marine space, an effort that was so far carried out predominantly within the individual sectors. Towards this direction, Marine Spatial Planning (MSP) comes to the forefront as the means for an integrated, strategic, and comprehensive planning and management approach with regard to maritime activities, having sustainability as an overarching goal. MSP can actually be grasped as a political process that aims at allocating uses in the sea space in order for social, ecological, and economic objectives to be met [60]. Adoption of this direction by the EU has resulted in the articulation of the Marine Spatial Planning Directive [61]. MSP in the EU is perceived as a cross-cutting planning and policy tool, creating a comprehensive framework for consistent, transparent, sustainable, and evidence-based decision-making. It also constitutes the main spatial instrument for handling maritime activities and implementing the EU Integrated Maritime Policy. The *participatory context* of MSP is placed at the very beginning of the respective directive. In fact, in paragraph 21 of its preamble, the need to engage all stakeholders, the authorities and the public, in order for the various stakes to be effectively and substantially represented during the various MSP stages, is stressed. The necessity for stakeholders' engagement is stated also in Article 2 (paragraph 2d); while Article 9 is exclusively dedicated to public participation. Public participation in MSP is perceived as a process that aims at both informing all interested parties; and consulting stakeholders, authorities, and the public at an early stage of maritime spatial plans' development. Unimpeded accessibility of all to produced plans is also predicted in the MSP directive; while the role of stakeholders as a source of knowledge that can significantly raise the quality of MSP is also acknowledged.

2.3. The Regional—Mediterranean—Context

Taking into consideration the focus of this work on the Mediterranean coastal, and especially insular territories, the study of the Mediterranean Strategy for Sustainable Development (MSSD) 2016–2025 [62] is of considerable importance. MSSD aims at deploying a strategic framework that addresses sustainability objectives of this region as a whole, while also guides national strategies to engage towards this direction. The vision created for the Mediterranean aspires " . . . *a prosperous and peaceful Mediterranean region in which people enjoy a high quality of life and where sustainable development takes place within the carrying capacity of healthy ecosystems*" [62] (p. 4). *Public engagement* forms the backbone of the Mediterranean strategy from its very beginning, since this is built up by means of a collaborative process, engaging representatives from a range of regional and national organizations and stakeholders. Attainment of the aforementioned vision is also predicted to be accomplished by means of a " . . . *strong involvement of all stakeholders, cooperation, solidarity, equity and participatory governance*" [62] (p. 7); and a " . . . *participatory approach to policy and decision-making*" [62] (p. 8). The issue of public engagement is particularly addressed in Objective 6 of this strategy, targeting governance improvement in order for sustainability targets to be reaped. Motivation of dialogue, cooperation at all levels and engagement in the governance process of the civil society, scientists, local communities and other stakeholders are foreseen in this respect, aiming to support pursuance of sustainability concerns.

2.4. Key Conclusions

The review of the above key policy frameworks reveals that *public engagement and participatory approaches* are critical and cross-cutting factors for implementing different sectoral policies. These establish transparency in decision-making and a sense of ownership of planning outcomes; while they prove to be valuable mechanisms for building trust between the decision-making parties and community groups. In particular, when it comes to maritime policies, directions for synergies' creation among stakeholders at the international, national, and regional and local level are indispensable. This holds especially true in case of UCH as part of the maritime environment, since this constitutes part of the national,

European, and even global history; and is connected with different territories, nations, and cultures. The role of stakeholders in collaboratively planning the preservation and sustainable exploitation of UCH is thus essential in all steps of the planning process. The same holds for the deployment of methodological approaches that enable their engagement in the particular Mediterranean insular territorial entities.

3. Sharing the Power—Participatory Planning in Sustainable (U)CH Management

In this section, the focus of discussion is on the triptych of public participation, cultural heritage cycle and planning cycle. These three concepts and their linkages form the conceptual ground for successfully managing (U)CH for local development purposes.

3.1. Public Participation in (U)CH Management

Since the beginning of the 20th century, the concept of participation has more intensely penetrated the planning endeavors, an evolution that displays consolidation of this concept in the planning and policy making realms. Such a consolidation is largely grounded on the rising concern about *sustainability*, but also the noticeable transition towards a bottom–up, more inclusive and democratic, decision-making paradigm. These two highly interwoven issues—i.e., sustainability and the bottom-up paradigm—are largely streamlining planning approaches during the last two decades [63]. In fact, a large part of the scientific and policy community nowadays regards participation as a prerequisite or a means for achieving sustainability objectives. This view is underpinned by arguments, such as the [64]:

- Complex nature of sustainability, calling for multi- and inter-disciplinary approaches and cross-fertilization of distributed, to a variety of societal actors, knowledge;
- Necessity to collaboratively visioning and reach consensus towards a desired future;
- Need for integrated approaches to sustainability, embedding or seeking to compromise diversifying stakes or interests;
- Evolving governance schemes, unfolding at multiple levels, both horizontally and vertically.

Public participation and interaction among various actors (citizens, businesses, public administration, research institutions, etc.) in urban or regional ecosystems is currently featuring *participatory planning* (PP) as the prevailing stream when conducting respective planning studies [65–68]. The scope behind PP is to set up inclusive, efficient, and effective decision-making processes and governance schemes for sustainably managing, among others, *scarce natural and cultural resources*. Moreover, as various researchers claim [64,69–74], PP is highly acknowledged for its potential to cope with sustainability concerns, by properly linking collaborative decision-making processes to current societal challenges. Therefore, public and stakeholders' engagement are grasped as inseparable parts in seeking to achieve and successfully implement sustainable solutions to societal or developmental planning problems, including management of the precious (*U)CH resources*.

Patsy Healey, a well-known planner, defines *PP* as a *communicative* and *people-centric* approach to decision-making, a process within which issues and problems are elaborated, while strategies and ideas are formulated [74]. The legacy of (U)CH is: (i) generated by knowledge, action and interaction, cultural creativity, and conflicts among different civilizations and social groups in a certain society through time [75]; and (ii) having an outstanding importance in the present and the future of society as a whole [29]. Given the definition of PP and the very nature of (U)CH, embedding PP approaches into cultural planning endeavors seems to be a wise choice for illuminating the above mentioned (U)CH aspects. Based on such a choice, *sustainable and resilient exploitation* of this heritage can be sketched; and *heritage-led pathways* to (local) future development, especially in remote and lagging behind territorial contexts, can be paved.

Additionally, PP approaches are perceived by many researchers as *platforms* for information exchange and knowledge production [73,76]. In such a role, richness of interaction and information exchange as to the value and developmental potential of (U)CH supports growth in *public awareness* and strengthens *responsibility* to (U)CH management. Mature and

knowledgeable community groups, through such processes, can become the safeguards of tangible and intangible heritage attributes. Furthermore, in the cases where this heritage is used for building up cultural tourism products and promoting localities as alternative cultural tourism destinations—i.e., a means to preserve and maintain (U)CH [77]—local communities need to have a 'saying', provided that they are the main recipients of the impacts of tourism. Furthermore, local communities are, at the same time, parts of the hospitality offered by the destination [78]. In this respect, the right of local societies in defining the ways this heritage is managed and shaping local value-driven cultural goods is acknowledged, featuring their active and decisive role in such a process.

This, in turn, implies that every *cultural planning exercise*, i.e., an exercise grounded on local (U)CH resource management, is or should definitely be a participatory one [73], taking for granted the strong and substantial interaction among the local community, planners, decision-making bodies, as well as the scientific and business community. In such cultural planning exercises, the added value of community engagement lies in its potential to enhance the very content of (U)CH through its identification, valuation, interpretation, protection, and conservation [34]. In addition to the previous contributions, community engagement can highly support or demarcate the stage of *narrative building* out of this heritage. This is a critical planning step that places emphasis on the exploitation of 'soft' community knowledge [78] and its use as the 'lens' for interpreting the tangible and especially the intangible heritage dimensions for serving narration purposes.

The remarkable role of participation and community engagement holds even truer when one comes to, specifically, *UCH planning endeavors*. In fact, UCH assets may acquire an important meaning for a much wider audience than just the local one, e.g., WWI and II remnants, representing incidents of the European or even the global history; and attracting interest from the local, national, and international scenery. Such assets, however, are quite important for localities and their population. The strong connection of UCH remnants with local communities can be justified by historical events that occurred in their neighborhood or local nautical traditions and respective unfortunate events or even incidents linked to the family, e.g., victims or survivors of a ship or plane wreck. Thus, sustainable and resilient exploitation of this UCH in planning heritage-led local development needs to *walk a tightrope*, balancing between the value and developmental role of such remnants as part of the European or global historical course; and their emotional meaning and value for the locals. This is, for example, the case of the island of Leros—the case study of this work—representing a typical example of remote Mediterranean island. Leros, apart from being endowed with a rich natural heritage, it also owns a (U)CH that is strongly related to important and of global reach, historical events. This heritage, witnessed through a large number of both land and underwater war remnants [31], unveils the role of this island as part of the Mediterranean scenery of WWII. This, in turn, implies that sustainable and resilient exploitation of this heritage is definitely a participatory endeavor, bringing on board all diversifying views and interests of the specific locality and conforming to potential constraints of the global context.

3.2. The Triptych of Participation, Cultural Heritage Cycle and Planning Cycle

Participation as a means for sustainable management of cultural heritage in general is stressed in the global and European strategic policy directions, as noticed in the respective contexts explored in the previous section. Participation in UCH management in particular, as a means for raising awareness and preserving this heritage, is also encouraged by UNESCO. In fact, the UNESCO's Scientific and Technical Advisory Body in its third meeting in April 2012 has, among others, highlighted the need to [79]:

- Promote models for UCH management that can support *sustainable economic development* objectives of regions, implying thus the sustainable and resilient exploitation of this heritage for steering growth and jobs' creation in respective territories; and
- Increase the positive image of underwater archaeology and strengthen the *involvement of the public* in the awareness, protection, and enjoyment gained out of UCH.

The latter is in alignment with the concept of the *cultural heritage cycle* (Figure 3). This cycle places 'people' at the epicenter; while also states that appreciation of heritage is a strong motive towards the desire to protect it. This, in turn, leads to further appreciation and enjoyment of (U)CH, raising thus the desire to understand it.

By Understanding

(d) People desire to understand (U)CH

(a) People value (U)CH

By enjoying

By valuing

(c) People enjoy (U)CH

(b) People care about (U)CH

By caring
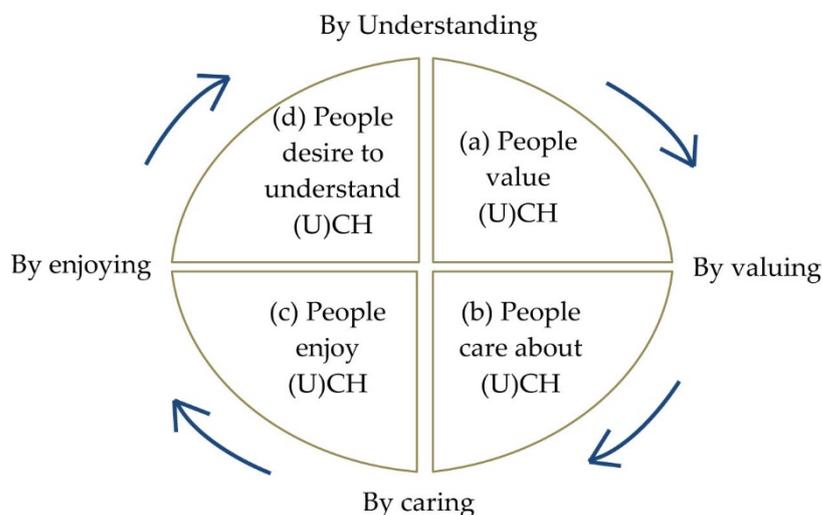
Figure 3. People as protagonists in the cultural heritage cycle, Source: adapted from [80].

PP exercises for sustainably managing (U)CH resources become even more critical in cases of remote and less-privileged, in developmental terms, islands of the Mediterranean region [31,81]. Such regions are witnessing the impacts of an *insularity condition* [33,82–85]; and thus CH in general and UCH in particular, coupled with their natural heritage assets, both land- and sea-based, actually form the bedrock for coping with these impacts and gaining competitiveness as alternative tourism destinations in the global scene. Sustainable exploitation of this heritage can, through community engagement, embed local flavor and 'soft' distributed knowledge in the construction of challenging narratives of such islands as *alternative, authentic, and experience-based* tourism destinations, to the benefit of social and economic cohesion and growth.

However, how can public engagement or participation in (U)CH management be accomplished? How is such an engagement linked to stages of the cultural heritage cycle? What are the benefits for both the planning exercise and those engaged in this? An effort to respond in these questions is carried out in the following.

Public engagement in participatory cultural planning exercises, seeking to achieve a (U)CH-driven heritage-led local development, can follow each single distinct step of the *planning cycle*, displayed in Figure 4. Within each single step, the role of participation and its contribution to the (U)CH planning endeavor differs. More specifically [73]:

(a) *'Assess current stage'*: at this stage the role of participation is *threefold*, addressing community engagement as a means for: (i) collecting (U)CH tangible and intangible information that can help planners to better grasp the scenery, the type or location of (U)CH and its surrounding environment; (ii) identifying values attached to (U)CH, intriguing community actors to consider their personal linkages to (U)CH and valuing this heritage; and (iii) establishing a platform for interaction, to be held throughout the planning exercise and play a catalytic role for raising community awareness and supporting the creation of community networks. Within this stage, actors and stakeholders engaged establish linkages with (a) and (b) stages of the cultural heritage cycle (Figure 3).

(b) *'Set goal and objectives'*: at this stage, community engagement is crucial for scrutinizing the goal and objectives of the cultural planning exercise. Such a goal setting process largely defines ways of resource management, both from a cultural and a financial point of view. Bringing on board the different views and perceptions of community

groups at this stage provides guidance to planners as to the locally-adjusted and value-driven goal and objectives that need to be pursued and their prioritization. Process and outcomes of this stage strongly relate to (a) and (b) of the cultural heritage cycle (Figure 3).

(c) *'Plan and evaluate'*: structuring and evaluating plans for featuring future developmental perspectives that are grounded, among others, on the sustainable and resilient exploitation of (U)CH is a quite decisive stage of the planning cycle. The same holds for community engagement and its empowerment in order to substantially participate at this stage. The value of participation lies in the fact that this stage addresses the structuring and evaluation of plans that embrace local values and inspirations; while serving at the best possible way local expectations [86]. Process and outcomes of this stage relate to (a), (b), and (d) of the cultural heritage cycle (Figure 3).

(d) *'Implement plans'*: plans, as outcomes of previous stages of the planning cycle, are implemented on the basis of a range of policy packages. Towards this end, commitment of community stakeholders to policy decisions demarcates success of plans' implementation. The more intense community engagement is at previous stages the more successful the implementation of plans and related policy actions will be. In this respect, it is quite important to feature a participatory process that engages community actors at all stages of the planning cycle. However, this is not always feasible, although desirable, due to time and budget limitations but also other constraints [31,87–89]. This stage relates to the heritage cycle as a whole (Figure 3).

(e) *'Monitoring results of plans':* an inseparable part of each planning process, targeting assessment of plans' implementation in order for re-orienting or reinforcing policy endeavors. Community engagement can support this stage by providing information on the performance of the specific plan and related policy measures towards reaching the goals and objectives set. In case of low performance, they can also support identification of failures and possible proposals for remediation or reorientation of policy measures. This stage is closely related to all stages of the heritage cycle (Figure 3).
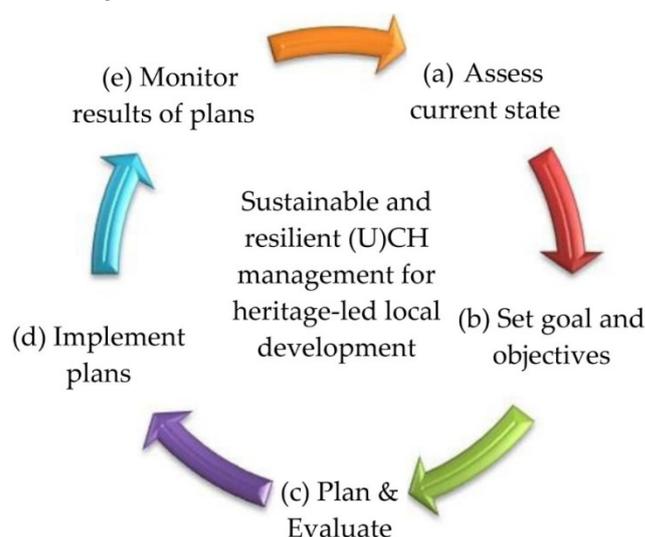
Figure 4. The planning cycle, Source: adapted from [73].

Successful community engagement in the above-mentioned stages of the planning cycle presupposes the very good planning and organization of participatory processes in each specific step. An extensive list of participation tools and related empirical applications, quoting both face-to-face and online participatory exercises and applying at different stages of the planning cycle, can be found in the literature. Careful selection of participation tools, in alignment with the specific participatory context, can frame the successful engagement of community members.

However, *public participation is not a 'one-size-fits-all'* approach. On the contrary, it largely depends on the context, the purpose, the maturity of community stakeholders and the spatial level this refers to. These elements are to a great extent defining the *level of participation* that can be achieved or is necessary at each stage of the planning cycle [90]. Arnstein [91], a founder of the concept of participation, claims that this level is closely related to *political decisions*, demarcating the power to be given to citizens in a planning process, ranging from 'non-participation' to 'citizens control'.

3.3. Conducting (U)CH Participatory Planning Processes

In order for more successful participatory outcomes to emerge when carrying out participatory planning exercises in general, or relevant exercises that target the sustainable exploitation of (U)CH in particular, one should have in mind that the *role of participants* can vary. In fact, this role is determined by the type of interaction that participants have with planners and decision makers in a participatory context; and can take one of the *three distinct schemes* described below.

In the *first scheme*, in which information flows from planners and decision makers to the community, a one-way interaction is taking place. This scheme can indicatively serve objectives related to the: raising of community awareness as to the value of (U)CH; diffusion of information on potential pathways (plans) towards the sustainable and resilient exploitation of (U)CH; strengthening of the sense of identity and belonging; demonstration of opportunities but also constraints emerging from the external decision environment, to name a few. In this case, community stakeholders are the *recipients* of information distributed by planners and decision makers, resulting in their empowerment and increase in their awareness and knowledge stock.

The *second scheme*, in which information flow is directed from the community to planners and decision makers, is also based on one-way interaction; and aims at gathering community-related information that is valuable for the planning exercise. Participants, in this respect, acquire the role of *producers* of information. The value of such information lies in the [73,90]: identification and analysis of stakeholders' perspectives, needs and expectations in order for the scope and outcomes of the planning exercise to be enriched; realization by planners of the value attached by the community to each specific (U)CH object; gathering of community's 'soft' knowledge, i.e., knowledge presenting diversified views and perspectives [78] in order for the current state of play to be illuminated; grasping of visions of stakeholders in order for desired perspectives as to the future of their land and the role of (U)CH in it to be pursued by planners; crowdsourcing for enriching (U)CH information on tangible and mainly intangible dimensions; conflicts' identification and management, reflecting diverging views and stakes of community groups, to name but a few.

Finally, the *third scheme* refers to a two-way information flow, namely from community stakeholders to planners and decision makers and vice versa. This scheme is strongly associated with a more democratic planning process. It places stakeholders at an equal position with planners and decision makers, i.e., a quite active position at all stages of the planning cycle, co-designing, and co-deciding ways of handling the planning issue at hand. Participants, in this respect, are rendered as 'prosumers', i.e., both producers and consumers of planning information.

Based on the previous discussion, Table 1 summarizes the benefits of UCH participatory planning processes for both planners and decision makers on the one hand and community on the other.

Table 1. Main benefits of UCH participatory planning for planners and decision makers as well as citizens and localities.

Benefits for Planners/Decision Makers	Benefits for Citizens/Localities
Data collection, validation, and better understanding of the study context	Enriching local knowledge stock on aspects/challenges/constraints etc. of the external decision environment
Deployment of human-centric and place-specific UCH narratives/Positive impacts on implementation perspectives/Policy buy-in	Co-designing place- and human-centric UCH narratives
Conflicts' management at early stages of the planning cycle—Consensus building	Maturing of participatory processes—Strengthening of local capacity for engagement and action
Communication and building of trust/Accountability and transparency	Raising awareness of local community as to the cultural/social/economic value of UCH
Legitimization of planning procedures and outcomes	Raising awareness of UCH protection/preservation and sustainable exploitation at the community level
Widely acceptable policy interventions targeting the sustainable and resilient exploitation of (U)CH	Locally-adjusted cultural management plans aligned with local visions and expectations
	Networking among stakeholders

Source: [73,92,93].

Today, *technological advances* are definitely an important ally for conducting participatory planning processes. Actually, the role of technology is essential for establishing new interaction patterns—e-interaction/e-participation [76]—among those engaged in a participatory process [73,89,94,95]. Thus ICT-enabled tools and applications, currently available to planners and decision makers, have broadened the scope of citizens and stakeholders' engagement in planning efforts. New communication patterns, with the consolidation of *social media* [96] have also established new streams for public participation [97]. Practices, such as public participation geographic information systems (PPGIS), online surveys, map questionnaires, online focus groups, citizens forums, and even 3D digital participatory planning used in The Netherlands [98], are only a few examples of the most common online tools, used to generate data from the public (crowdsourcing) [95]. In addition, social media have gained a prominent role in communication, expression of opinions and data collection, as well as dissemination of activities that can reach a wider interested public.

Online engagement, as various researchers claim [74], enables a larger number of stakeholders to become part of participatory processes at their convenience, thus further democratizing decision-making processes; while also raises the issue of the quality of interaction. Conversely, several research studies claim that face-to-face participatory schemes behind closed doors do not always ensure transparency [99]. However, the power of technology in strengthening participation is currently not fully tested. Moreover, empirical studies do not support this opinion. On the contrary, they conceive the combination of both face-to-face and online interaction as an ideal solution, considering the former as a critical first step in order for trust—a crucial aspect for engagement—to be established; and thus the latter to be more easily accomplished.

Based on the linkages identified between participation and (U)CH management in the cultural planning context, the next section attempts to illuminate some results that emanate from a strategic participatory (U)CH planning exercise. This is conducted in the case study of Leros Island, Greece; and follows the rationale of the policy and conceptual ground so far discussed.

4. Lessons Learned from the Leros Island (U)CH Participatory Case Study

Small Mediterranean islands, such as Leros, are in most cases lagging-behind regions due to their condition *of insularity*. Such a condition is synonymous with a range of

inefficiencies, e.g., small size, scarcity of natural resources, vulnerability to environmental and climate change risks, geographic isolation, and distance from major transport and trade routes, to name a few [37,53,82,84]. *Natural and cultural resources* constitute the comparative advantage of these regions when coping with that kind of inefficiencies. However, it seems that small islands do not always have the capacity to transform these advantages into competitive ones; and, thus, assert a position as alternative cultural tourism destinations in the global tourism arena.

The island of Leros (Figure 5) is such an example. It is a small island of the Mediterranean region, endowed with a remarkably rich WWII land CH, and especially UCH. The latter is witnessed by fourteen well-reputed ship and plane wrecks, all remnants of fatal WWII events. Among them can be mentioned the destroyer 'Queen Olga' shipwreck, sunk in 26 September 1943 in Lakki Bay; the remains of the aircraft JUNKERS JU 52, sunk in the Battle of Leros on the 13 November 1943; and the wreck of the ARADO 196 aircraft, a German hydroplane, also sunk in the Battle of Leros. These are only a few representative examples of the valuable UCH sites [31]. Leros, as such, is grasped as a *unique historical land- and sea-scape*, hosting significant, of global and local (glocal) importance, land and maritime cultural remains. In its more recent historical course, Leros is identified as a "Soul House", serving as: a "concentration" camp for isolating mentally disturbed people (1957–today); an exile camp for dissidents in the Greek dictatorship (1967–1974); and a 'hot spot' for refugees arriving at the Easter Aegean islands' complex (2016–today) [31].

Figure 5. Geographical position of Leros Island, Source: [100,101].

In the following, the previously discussed methodological considerations, with particular emphasis on the *participatory dimension*, are specified in the Leros case study; and empirical results obtained from the specific strategic cultural planning exercise are critically discussed. The scope of this exercise is to render Leros Island a notable and attractive heritage-led alternative tourism destination (for more details on this work see [31]). It should be mentioned that the approach adopted for managing (U)CH in this study deals with both land and underwater cultural heritage, but also land and maritime space of Leros in a holistic and integrated way. Such a decision is made on the basis of the inseparable

nature of both CH and UCH being, to a large extent, parts of the same narrative, that of WWII.

4.1. Sustainable Management of Leros (U)CH—Methodological Approach

The methodological approach, developed in the Leros strategic participatory planning exercise, consists of two main streams, namely the:

- *External decision environment stream*, shedding light on developments that are framing planning outcomes and related policy choices in the specific case study; and
- *Internal environment stream*, providing a deep insight into the current state of Leros Island per se. This is of decisive importance, setting the ground upon which planning options for future heritage-led developmental trails of Leros are explored.

Concerning the *external environment*, the nature of the planning problem at hand draws upon a range of distinct dimensions, for each of which the specific strategic policy frameworks at the global, European, and national level need to be taken into consideration. In this respect, indulging in frameworks, such as those presented in Section 2, is indispensable. Their study confirms the multidimensional nature of the (U)CH management, addressing:

- Sectoral issues, e.g., culture, tourism;
- Spatial issues, e.g., land and marine character and uses;
- Historical issues, e.g., WWII (U)CH as part of the national but also European and global historical course;
- Societal issues, e.g., remembrance of historical events and human losses;
- Environmental issues, e.g., UCH as marine reef or a source of sea pollution;
- Governance issues, e.g., WWII (U)CH policy making at different spatial levels; and
- Developmental issues, perceiving (U)CH as a resource and a 'production factor'.

The study of these frameworks in Section 2 reveals the cross-cutting nature of *public and stakeholders' engagement* in order for the challenges of the above distinct, but highly interwoven, dimensions to be effectively dealt with. It also frames the decision environment, within which alternative options (scenarios) for dealing with the specific planning problem at hand are sought. Such options need, for example, to conform with the ICZM protocol guidelines, calling for the deployment of sustainable land (coastal and inland) and maritime tourism and recreation forms that preserve coastal ecosystems, natural resources, cultural heritage, and landscapes, while also promoting specific forms of coastal tourism, including cultural, rural, and ecotourism; or to align with the protocol's guidelines with regard to the preservation and protection of the cultural, in particular archaeological and historical, heritage of coastal zones, including the underwater cultural heritage.

Following policy directions emanating from the international and the European context for framing respective case studies in Greece—e.g., the Leros Island case study—is fraught with difficulties. Barriers towards this end relate to the lack of relevant policy framework at the national level. Indeed Greece, despite its remarkable coastal and insular regions and the distinguishable UCH, has not yet ratified the 2001 UNESCO Convention or the ICZM protocol. The reason for that lies mainly in the tardy and time-consuming bureaucratic processes. Additionally, the Greek maritime policy framework is mainly sketched by some initial steps towards IMP, as well as the integration into the Greek legislative framework of the MSFD [102] and the MSP [103] directives. These put in place significant tools towards the sustainable management of the marine environment and its valuable resources. However, the value of those tools is significantly reduced due to the lack of a national maritime policy. Furthermore, policy directions regarding activities related to UCH sites, e.g., diving, were till recently placing significant obstacles to the sustainable exploitation of this heritage by totally banning accessibility of these sites to divers [85]. This attitude has changed after the official launch of the Law 3904/2005 [104] for recreational diving; and barriers to accessibility of UCH sites are removed. Further improvements of the contemporary legislation occurred by a recent law [105] on special forms of tourism. This law promotes diving tourism at submerged cultural sites; and encourages related

policy action in order for a sustainable, resilient, and environmentally-friendly alternative tourism model to be achieved in respective destinations. Modernization of the Greek legislative framework, coupled with the opening up to the public of 91 diving sites in 2021, witness a significant UCH-related cultural turn in the national developmental policy. At the same time, however, important issues as to the effective preservation and protection and sustainable exploitation, in alignment with local visions and expectations, are raised.

Having demarcated the external decision environment, defined by the international, European and national policy framework, the study of the *internal environment* follows. This is accomplished as part of the methodological approach developed in this work, aiming at achieving sustainable and resilient heritage-led local development pathways in the island of Leros. The steps of this framework are presented in Figure 6.
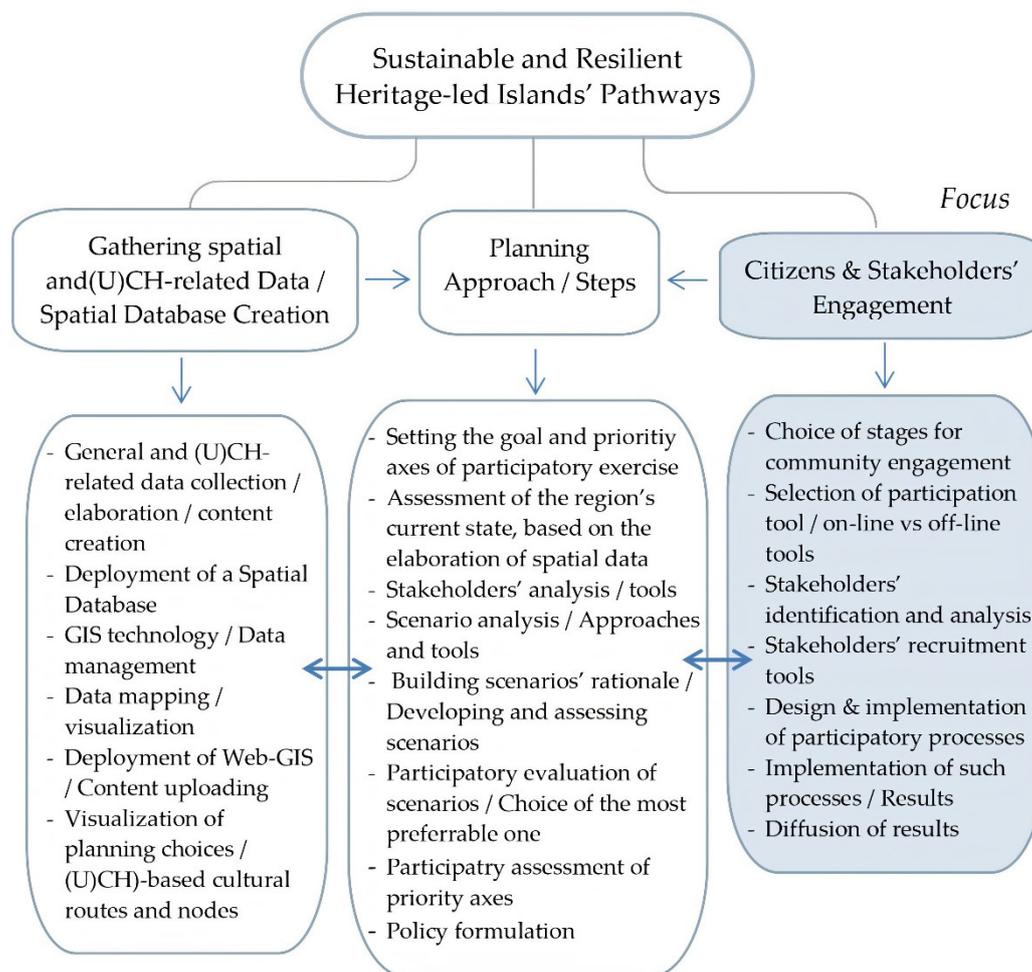

Figure 6. Pillars of the methodological framework for developing sustainable and resilient heritage-led local development pathways in Leros Island, Source: adapted from [31].

More specifically, this framework consists of *three closely interrelated pillars* (Figure 6), with each one of them being further analyzed into distinct steps, dedicated to carrying out specific tasks of the study.

The *first pillar* relates to *spatial data collection*, both of a general nature (e.g., population, socio-economic structure, technical infrastructure, land and maritime uses) and (U)CH-related. Elaboration, mapping and visualization of these data by use of GIS technology are also conducted. The data are then used to feed with content the:

- Spatial database deployed in this study; and
- Web-GIS application, developed for communicating planning choices to Leros community.

Additionally, these data form the ground for assessing the current state, a task under-taken in the second pillar.

The *second pillar* of the Leros' methodological framework is associated with pure planning tasks, embedding a range of contemporary tools for conducting these tasks. These tools relate to spatial data collection and GIS data management for assessing the current state of Leros Island; scenario analysis; participatory scenarios' assessment; data-driven policy decisions based on community preferences; to name but a few. Inferences of work carried out at this stage, but also various other constraints (time, budget, etc.), have framed decisions as to *context* of community engagement, e.g., stages of engagement, role of participants.

Decisions made in the second pillar are used as an input for demarcating work in the *third pillar*. In this pillar, the participatory context of the Leros' case study is further specified by means of the concrete steps and tasks, demonstrated in Figure 6. Stakeholders' identification and analysis form the basis of this pillar; and are important for properly determining the groups to be engaged, their attributes, means of interactions, planning stages in which engagement can produce the most fruitful results, etc.

Insights into the internal environment—i.e., the current state of Leros and its dynamics—for better realizing the planning scenery are grounded on all three pillars' work. More specifically:

- Collection and elaboration of various types of spatial data in *pillar 1* set the ground for a first assessment of the current state of this environment;
- Further elaboration of these data in *pillar 2* allows for useful—quantitative and qualitative—inferences to be drawn;
- Finally, data gathered in previous steps is complemented in *pillar 3* by means of community engagement processes, enriching the planning process with locally-driven data.

4.2. Engaging Leros Community in the Planning Endeavour—Empirical Results

In this part, results obtained in the Leros case study are presented, with emphasis on the participatory context of the strategic cultural planning exercise.

4.2.1. The Participatory Process—Means, Context, and Stages of Community Engagement

Time and budget constraints are decisive factors for making a decision as to the type of interaction—face-to-face or online—between the research group and the community of Leros. Based on these limitations, interaction with local community groups is accomplished *online*, using social networks as a 'vehicle', i.e., a popular and widely used interaction platform. Full description of the proposed priority axes and scenarios (Table 2) are, thus, presented online by use of a purposefully deployed Web-GIS application (https://goo.gl/tM1Nny, accessed on 25 July 2021). 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 routes. Community members are recruited through direct e-mails and social media announcements that are deliberately created for disseminating the participatory undertaking; as well as personal contacts to influential local representatives.

Taking into consideration insights gained from the previous planning steps, but also time constraints for conducting participatory planning work in the Leros case study, a decision is made as to the *stages* of the planning process in which community engagement is worth taking part. As such are defined:

- The stage of *assessing current state* of the island, aiming at gathering participants' views as to the level of (U)CH sustainable exploitation for local development purposes;
- The stage of *setting goal and priority axes* for action, as an important starting point of the Leros planning exercise that needs to embed local community's views, perspectives and priorities;
- The stage of *assessing proposed scenarios*, which demarcates distinct planning choices as to the potential future developmental perspectives of Leros Island. These need to be

validated and eventually improved, but also secure consensus at the community level and better reflect laypeople values and future expectations.

Based on the above decision, the context of community engagement is articulated, addressing the following *requests*:

- Assessment of the *current state* of exploitation of Leros' cultural capital;
- Choice of three, out of the eight (Table 2), most preferable *priority axes* for building up a heritage-led strategic cultural development plan;
- Selection of the most *preferable scenario narrative*, out of (Table 2): (i) Scenario A', entitled "Leros: From a 'Soul-House' to a Place of Multiple-Opportunities", presenting a multi-thematic, spatially-concentrated—in the form of *cultural nodes*—model of cultural tourism development; and placing emphasis on balanced, heritage-led, local development concerns; (ii) Scenario B', entitled "Leros: An 'Open Museum' of European Cultural Heritage and Identity", featuring a more decentralized spatial pattern, establishing island-wide *cultural routes*, connecting WW II heritage assets;
- Enrichment of the *content* of the proposed scenarios according to local experience, empirical knowledge, values and expectations.

Table 2. Rating of scenarios and priority axes by Leros community.

Rating of Scenarios		Rating of Priority Axes	
Proposed Scenarios	**Community Rating of Scenarios %**	**Proposed Priority Axes**	**Community Rating of Priority Axes %**
Vision of Leros Island in Scenario A' "From a 'Soul -House' to a place of Multiple Opportunities"	36	**PA1**—Designation of local cultural identity as a pillar for economic development and social cohesion	45
		PA2—Treatment of land and underwater cultural heritage in an integrated way	27
		PA3—Integrated approach of natural and cultural resources	21
		PA4—Development of alternative, experience-based, cultural tourism products	35
Vision of Leros Island in Scenario B' "An 'Open Museum' of European Cultural Heritage and Identity"	64	PA5—ICT-enabled promotion of land and underwater cultural heritage	16
		PA6—Enhancement of local entrepreneurship and creation of value chains	19
		PA7—Raising awareness of local community on the value of natural and cultural resources	28
		PA8—Balanced cultural tourism development—removal of inequalities	30

Sources: [31,88].

4.2.2. Results and Discussion

The Leros participatory process lasted 2 months (July and August 2018), reaching in total *204 responses* from people falling into three categories, namely: residents, people having Leros as an origin place, and people having an interest in Leros island. Participants' profile is evenly distributed from a gender point of view. This is not the case from the point of view of age groups. In this respect, the age group of 18–35 (49%), as the most familiar with social networks' interaction group; and the age group of 35–50 (28%), being the most

highly educated group, with the majority of them having Leros as their origin place, were the most prevalent.

Based on the responses received with regard to the previously mentioned requests, the following *inferences* are made:

- The potential of the valuable, and of global reach, (U)CH of Leros Island, according to respondents' view, remains largely untapped, thus leaving, also, unexploited the quite promising developmental perspectives this can bring to the place;
- The value of WWII (U)CH in the eyes of local community is pretty high. They recognize the need to protect it and use it as a 'production factor' towards achieving a qualitative heritage-led cultural tourism destination profile. Scenario B' in this respect, visioning Leros as "An 'Open Museum' of European Cultural Heritage and Identity" and having WWII (U)CH as the prevailing feature, rates first, at a distance from the second one proposed (Table 2);
- Participants realize the value of the local *cultural identity PA1* as a main pillar for social and economic cohesion; and a means for coping with *insularity drawbacks*. Therefore, priority axis *PA1 is rated first* and at a distance from the rest ones;
- The priority axis PA4 that aspires to render Leros a peaceful, qualitative, authentic, and experience-based cultural destination *rates second* in community preferences. This reveals their desire towards developmental trails that keep close or do not disturb their *legacy and identity*. This issue, in turn, further reinforces the belief that they recognize and appreciate the value of their heritage and its distinct role in featuring local identity;
- Respondents also display a higher preference—*third position* in their rating—on PA8, that seeks to promote a *fair and just development* and *remove inequalities* inherent in the island. This is an important aspect, unveiling a strong *solidarity culture* and *sense of community and belonging* that seems to prevail among local population;
- Finally, priority axis PA7 is coming next to respondents' choices, recognizing *awareness raising* as a means for (U)CH preservation and protection, as well as sustainable and resilient exploitation. Such a view reveals a *mature community*, realizing risks menacing integrity of their cultural heritage; and grasping knowledge and awareness as important assets in coping with these risks;
- Quite close to PA7 is PA2 that proposes an *integrated management* of land and underwater cultural heritage. This response was rather expected, taking into consideration the inseparable nature of the land and maritime CH as parts of the same narrative, i.e., remnants of the WWII.

A general conclusion, drawn from the experience of the Leros participatory exercise, is that despite the limited number of online responses, willingness of local people to contribute is noticeable, demonstrating the way *cultural concerns can motivate active participation*. This willingness is revealed by means of informal communication of local people with the research group, offering documentation material, additional local sources of information, storytelling about historical events that 'stigmatized' the course of the island, etc. Such material was also delivered by a number of respondents, as a reaction to the request—open question—to provide any kind of information they consider as enriching narratives. Additionally, certain respondents have focused on the *barriers* to a sustainable (U)CH-led local development, listing as such the *lack of* an integrated cultural plan that is grounded on a collaboratively-built vision and a strategy to implement it. According to respondents' view, the political will for integrating the distinguishable natural assets, as well as the land and underwater (U)CH into local planning endeavors is also missing. Finally, insularity drawbacks are perceived as a confining factor for promoting Leros as an all-year-round destination.

5. Conclusions

As various researchers claim, the Mediterranean as a whole is an open museum of European identity and history, both in its land and marine space. Especially in the marine

part, the abundance of WWI and II remnants, resting at the bottom of the sea, is due to fatal events during the region's pivotal role as a main 'theater' of these two wars [29]. This remarkable land and maritime cultural heritage of the Mediterranean—(U)CH—coupled with its exceptional natural diversity, long curling coastal shoreline, mild climate and warm hospitality, have rendered Mediterranean regions highly attractive and reputed tourism destinations global wide and all-year-round.

With the *culture–tourism nexus* being currently highly rated in the political agenda in various parts of this region, new, meaningful and authentic, experience-based and of low ecological footprint tourism forms are expediently gaining ground, in alignment with the *sustainability and resilience* goals, mentioned earlier. Within such a scenery, the effective WWI and II (U)CH protection and preservation; and its integration into sustainable local development planning endeavors, appears as a promising perspective in the arsenal of regional planners and policy makers, especially when it comes to remote lagging-behind insular regions. In such regions, the role of UCH in particular is notably challenging, taking into consideration availability of submerged cultural resources; and the rising trend in diving tourism as a means of exploring life and history in an unknown and COVID-19-free world, the marine one; and gaining new sensational and authentic experiences.

From a planner's perspective, both (U)CH protection and preservation and its integration into sustainable local development pathways constitute specific dimensions of sustainability concerns; and their pursuance is largely grounded on public engagement and governance. In fact, these two concepts are grasped as cross-cutting issues, establishing linkages between the *cultural heritage cycle*—i.e., exploring, knowing, understanding, valuing, assessing, enjoying, and protecting (U)CH—and the *planning cycle*—i.e., setting up human-centric and value-based visionary solutions for the sustainable and resilient management of (U)CH to the benefit of local development and prosperity. Public participation has nowadays gained a prominent role in the policy agenda at all spatial levels—international, European, national, and regional—empowering citizens and stakeholders in becoming parts of decision-making processes. When it comes to planning exercises linked to (U)CH, citizens and stakeholders possess a more intimate and substantial role as: parts of the local culture, demarcated through local experiences, expectations, visions, and beliefs; and safeguards of cultural assets, in both their tangible and intangible forms.

In the integrated and largely developmental stand, taken in the Leros case study in terms of WWII (U)CH handling, sustainable management of this precious heritage for serving local development goals is being strongly linked to the establishment of the culture–tourism nexus by means of alternative cultural tourism forms. Cultural but also natural assets of Leros can indeed render this island a quite attractive and competitive *battlefield, cultural and diving tourism* destination. Such a linkage of (U)CH to alternative tourism forms is currently a successful practice in many places around the world; and is rated high in the agenda of many Mediterranean peripheral destinations, e.g., Croatia, Spain, Italy, and Malta [85], with remarkable multiplier effects for local economies.

From the point of view of community engagement, the Leros exercise for paving human-centric and (U)CH-led local developmental trails is proven a promising *mutual learning process* for both the research team and the local community. Actually, mutual learning, recognized as a distinct dimension of participatory approaches, is nicely confirmed in this case study as well. Interaction that has taken place in the Leros participatory context has, among others, revealed that lay people in this remote island region rate the tangible and intangible dimensions of their cultural heritage pretty high. Actually these dimensions form the 'glue' for maintaining social cohesion and solidarity bonds among community members, and the 'vehicle' for upholding their identity intact. Additionally, *participation* has provided valuable input for finalizing the Leros heritage-led strategic plan, embedding in the final proposal local community's expectations, visions and aspirations for the future, and prioritizing specific policy areas for further action. *Web-GIS platform* as well as related visualization and text description of the two visionary scenarios, prepared by the research team, have also positively affected community's understanding as to the role

of (U)CH as a valuable 'production factor'; and its potential, when sustainably managed, to steer new opportunities for a fair and just local development, economic growth, jobs' creation and socio-economic cohesion. It has also revealed the power of *awareness raising* as a means for protection and preservation of heritage and a defining factor for sustaining community's identity.

The digital transformation and the development of a wide range of ICT-enabled planning applications—e-planning—and communication tools have steadily affected the way public participation is currently accomplished. *Online tools* are broadening interaction potential by removing time and space *barriers* and offering opportunities for a larger number of people to become part of e-participatory processes. However, this statement lies in digital skills, educational level, age, participation culture, and capacity of local leaders to inspire people, to name a few. Low educated, aged, and mostly ICT skill illiterate people in *remote islands* are confronted with barriers to engage in such digitally-enabled processes, as proven by the low e-engagement rate in the Leros case study. However, such inefficiencies need to be worked out, since adoption and use of e-enabled interaction means seems to be an advantageous option for alleviating insularity barriers.

In a nutshell, the *triptych* of cultural heritage, (cultural) planning, and public participation, conceptualized and exemplified in this work, seems to gain ground in current research efforts [106], representing three highly interwoven concepts. Their value, as the Leros case study has showcased, is largely appreciated in remote and less privileged regions, such as Mediterranean islands. Taking the wording articulated in [107] (p. 2), claiming that *cultural heritage* is " … *a shared resource, and a common good"* for granted, its interpretation and management has to embrace a rich variety of skills, views, valorization, and perceptions. These can be brought on board by *community engagement*. From a *planning perspective*, managing of (U)CH is grasped in a strategic, participatory and integrated way, displaying both a spatially narrow and short-term, as well as a broader and long-term perspective. The narrow and short term one perceives (U)CH as a valuable resource and a 'production factor', a pillar for tracing sustainable and locally-adjusted developmental pathways of, particularly, the less privileged remote island regions in the Mediterranean. From the broader and of more long term perspective, at the core of its conceptualization and management lie *sustainability and resilience* concerns, and an attempt to handle (U)CH as a " … shared resource, and a common good", keeping it intact and inheriting it to future generations. Successful compromise of both views implies an effort to make the past—as a shared and valuable legacy—an inseparable part of the present and, most importantly, of the future.

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