BOTTOM-UP APPROACH TOWARDS SYSTEMATIC MANAGEMENT OF UNDERWATER CULTURAL HERITAGE IN MONTENEGRO

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ABSTRACT

Although a signatory of the UNESCO Convention on the Protection of Underwater Cultural Heritage, Montenegro needs more initiatives to develop institutional capacities to foster the sustainable management of underwater cultural heritage. Through the implementation of the WRECKS4ALL project, within the Interreg IPA CBC programme, the aim was to raise awareness of the stakeholders on the necessity of development and implementation of the system for sustainable management of underwater cultural heritage which smart approach will enhance touristic attractiveness and support the economic growth of the coastal areas. To assure the project objectives' influence and sustainability, the bottom-up strategy has been applied through the various project activities both on a national and institutional level.

Keywords: underwater cultural heritage, dive tourism, management model, bottom-up, development.

The geographical position and features of the eastern Adriatic coast have been favorable for the early development of maritime activities. Therefore, maritime archaeological finds within the Montenegrin basin, although insufficiently explored, are very diverse. There is ample evidence of shipwreck remains ranging from Hellenistic and Roman merchant ships, and vessels from the Middle Ages, to those that were used in the previous century mainly for military purposes. Through the various periods of naval warfare on the Adriatic Sea, several vessels are declared missing in the territorial waters of Montenegro. Their resting places have to be identified, whilst the already identified remains of maritime and underwater cultural heritage have to be interpreted and acknowledged as an immeasurable contribution to the attractiveness of the Montenegrin coast [1].

Underwater cultural heritage as a resource for tourism development in the coastal areas of Montenegro is still underestimated. Montenegro has a short history of underwater and maritime archaeology, whilst the institutional framework for research and protection of underwater cultural heritage remains undeveloped. Despite having ratified the 2001 UNESCO Convention on Protection of Cultural Heritage, there is institutional confusion over which body is responsible for ensuring the implementation of the Convention. Moreover, a functional system for the research and protection of underwater cultural heritage was never implemented. Although there were several initiatives, the institutional framework, such as the department for underwater archaeology would be, was never established within any of the institutions related to cultural heritage. As an initiative of foreign institutions, several underwater archaeological projects have been undertaken in Montenegro, yet the participation of Montenegrin archaeologists has been mostly on the level of technical support [2]. On the other side, dive tourism is still developing in the legislative grey zone between the sport and the burden of military mentality. The number of attractive locations along the coast of Montenegro, of both natural and cultural heritage, presents a potential for dive destination development [3]. What prevents it is the absence of legal regulations, institutional recognition of this tourism sector and strategic promotion at the local, regional and international levels. From the perspective of the wider region of the Eastern Adriatic, the situation in Montenegro is representing unbalanced management and integration of underwater cultural heritage into the tourist offer [4]. Likewise, the development of recreational scuba-diving tourism is at a different level between the countries. Aiming to rise attention to those issues and create an innovative tourism offer based on the underwater cultural heritage of the Eastern Adriatic region, the team of the Faculty of Maritime Studies, University of Montenegro developed and led a project "Protecting underwater heritage through its digitalization and valorization as a novel touristic offer - Wrecks4All". The project has been approved and co-funded by the European Union's ERDF and IPA II funds on the trilateral call Croatia, Bosnia and Hercegovina and Montenegro [5]. The overall objective of the project was to contribute to strengthening and diversifying the tourism offer based on the underwater cultural heritage of the East Adriatic region through cross-border management, protection, promotion and sustainable valorization of shipwrecks and other unique underwater

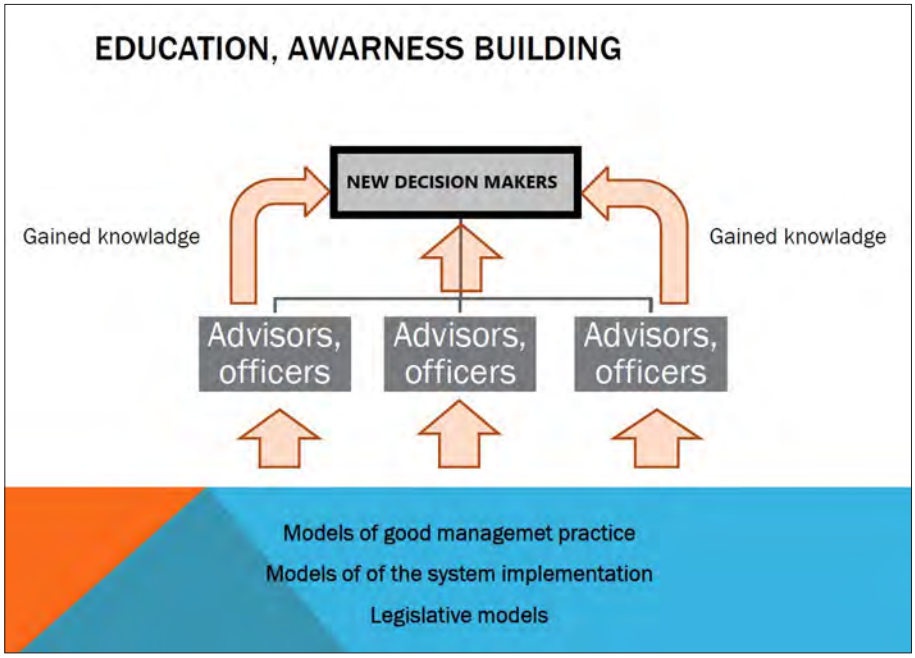

Fig. 1 - ***Institutional bottom-up approach.***

Fig. 2 - ***Workshop about dive tourism legislation reforms.***

heritage sites [6]. The project was set to foster transnational cooperation and the transfer of knowledge, skills and competencies between relevant stakeholders based on the examples of good practice.

Implementation of the WRECKS4ALL project has been challenged by both COVID-19 and the turbulent political situation in Montenegro which brought continuous changes in the decision-makers of the most important stakeholders. Therefore, a strategy based on a bottom-up approach has been designed aiming for a better impact and implementation of project activities through workshops, meetings, work with focus groups, interviews and questionnaires [7]. To prepare the audience, set the base for the bottom-up approach and draw the attention of the general public, collective awareness has been raised through the presence of subjects relevant to underwater cultural heritage and sustainable dive tourism in various media before the commencement of project activities. The project activities began with the mapping of cultural and touristic sector stakeholders in the chain of underwater heritage and scuba diving tourism through predefined stakeholder inclusion criteria, methodology and the definition of joint objectives. A stakeholders mapping report was used to create national-level groups of stakeholders in the chain of scuba diving tourism and underwater cultural heritage completely enlightening their influences, mutual connections and the dynamics in their relationships [8]. The bottom-up approach in working with the stakeholders was set to start from the municipal level institutions towards the higher governmental bodies. At the institutional level, due to frequent changes of decision makers, the bottom-up approach has been focused on the work with the permanent employees, officers and advisers. The objective of this approach was to influence lower permanent hierarchical levels which would eventually impact and influence the newly politically appointed decision-makers (fig. 1). The aim was to address the main issues related to the legislative framework and introduce various models of good practice, transfer skills and knowledge and raise awareness on questions related to underwater cultural heritage and dive tourism.

The action plan for cross-border management, improvement and touristic valorization of underwater cultural heritage was created as a tool kit which was used to systematize the problems and offer state-of-the-art

solutions. The action plan in general is a realistic roadmap designed for improving and developing a dive destination based on the attractiveness of the protected and managed underwater assets of Montenegro. The sections of the action plan were presented through workshops and meetings, emphasizing the necessity of the various legislative reforms and implementation of system mechanisms for the development of dive tourism and management of underwater cultural heritage (fig. 2). The first point of the action plan was the distinguishment of dive tourism from sport and military through the implementation of standards for recreational diving services in laws and bylaws. The second point was the recognition of underwater cultural heritage as a cultural and touristic resource by establishing a system for protection and management based on institutional synergies, communication and cooperation. Both concepts were comprehensively presented through various models and examples of good practices applicable to the institutional system of Montenegro. Through the activities within the work package dedicated to the development of destination management and promotion of the underwater cultural heritage, the WRECKS4ALL project team created a destination management model tailored for Montenegro. The model was based on the action plan and it was created after meticulous analyses and feedback from numerous workshops and meetings with stakeholders. The photogrammetry course with the development of knowledge and skills relevant to the management of underwater cultural heritage was delivered to create capacities for digital documentation of underwater cultural heritage both within governmental institutions and the dive tourism sector.

Fig. 3 - ***Virtual Reality Show Room of the Faculty of Maritime Studies, Kotor***

The project's added value was to support the development of smart and sustainable scuba-diving tourism based on underwater cultural heritage, enabling accessibility for the wider public through innovative digital technologies. Mapping of shipwrecks/underwater heritage for scuba diving tourism thematic routes network has been conducted after the agreement on the cross-border selection criteria [9]. The purpose of mapping was the selection of the sites for photogrammetrically scanning and production of 3D models and their Virtual and Augmented Reality presentations. Three sites per country were documented in 3D photogrammetry and three by photography and video for the virtual and augmented reality products based on dry-dive experience and storytelling [10]. The mobile application WRECKS4ALL comprises VR/AR tours and a virtual map of underwater heritage trails whilst the interactive map of dive locations of cross-border regions is available online [11]. An innovative tourism offer is currently available in newly refurbished showrooms in the Croatian Maritime Museum Split (CRO), Brodari building in Mostar (BiH) and Faculty of Maritime Studies Kotor (MNE) (fig. 3) where the public can enjoy a VR experience and learn about the underwater cultural heritage of the cross-border project region. On the cross-border scale, the project encouraged transnational information exchange and networking between the research institutions, tourism industries, the cultural sector, visitors and wider society fostering synergies. Eventually, the development of tourist products based on the common underwater cultural heritage of the East Adriatic region set a framework for local individual actions.

In Montenegro, WRECKS4ALL went beyond the expected project outputs and deliverables. The project concept and activities left an impact on the Strategy for tourism development to 2025 and the initiative was reflected in the draft of the new Law on Tourism and Services.

Recognizing the necessity for the institutionalization of underwater and maritime archaeology, the University of Montenegro established the first research unit in Montenegro dedicated to underwater cultural heritage.

Laboratory of Maritime Archaeology is the first country's unit with technical and expert capacities for the further development of this discipline in Montenegro. The mission of the Laboratory of Maritime Archaeology is to ensure the sustainability of WRECKS4ALL results and foster research in maritime and underwater archaeology, support policy development and make the underwater cultural heritage of Montenegro accessible to the public by applying state-of-the-art methodology and the highest scientific standards for investigation, documentation, interpretation and promotion of maritime archaeological and underwater cultural heritage sites.

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Notes

[1] Royal 2015; Gačević 2012.
[2] MacKintosh 2019.
[3] Gačević 2012.
[4] Zmaić 2009; Manglis *et al.* 2021.
[5] www.interreg-hr-ba-me.eu/project/wrecks4all/.
[6] Henderson 2019.
[7] Manglis *et al.* 2019.
[8] Firth 2018.
[9] Fa *et al.* 2011.
[10] Bruno *et al.* 2016; Bruno *et al.* 2017.
[11] www.wrecks4all.com.