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ENVIRONMENTAL REPORT

THE CASE OF THE CASTLE OF RODON
THE CAPE OF RODON

FEBRUARY 2023

This report and its findings are supported in the literature of the area, on sight observations, and official communications with institutions. It represents an analysis of the author in several directions and it is not supported by concrete studies.

This article is part of the “Solutions Journalism” cycle, which aims at bringing a new approach to thorough reporting, aiming at identifying problems and their solutions. This article was prepared in cooperation with the EDEN Center, focusing on the environment in Albania. Amofra Media publishes time and again similar articles which belong to “Solutions Journalism”.

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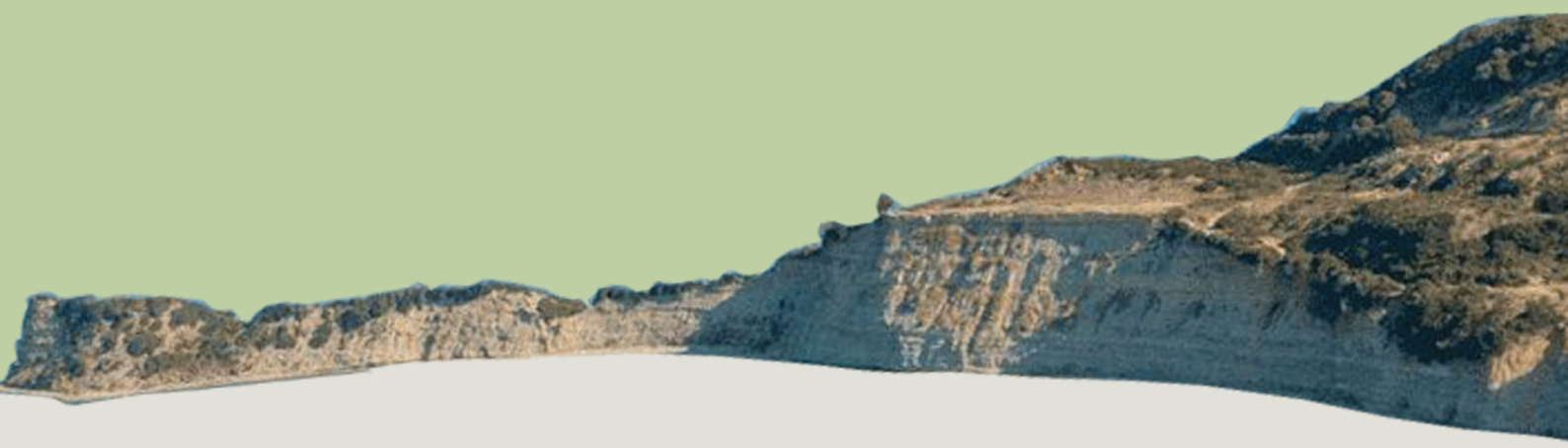

Publisher: Amfora Center
Author: Ermelinda Mahmutaj
Working Group Leader: Geri Emiri
Layout: Arlind Veshti
Translated by: Brian Gega
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Descriptive summary of the values of the Cape of Rodon and the ecosystem it shelters

The Cape of Rodon enjoys the “Natural Monument” conservation status and it has the same scale of protection as a “strict nature reserve”. The area is protected and managed for the conservation of the special natural, cultural, historic, and archeological characteristics and peculiarities.

The field before Saint Anthony Church, Cape of Rodon
Photo: Arlind Veshti/ Amfora Media

The Cape of Rodon is of a triangle shape between the Rodon and Lazi Bays, forming a strip of land in the form of a peninsula that enters within the Adriatic Sea. It is the biggest cape in Albania which is closed by Drini Bay in the north.

Parallel to its shore there are clay hills, which are distinguished by their round shape and surround the entire cape. The hills are covered in typical Maquis shrubland and the dominant plants are strawberry trees, heathers, hornbeams, etc.

The height of the shrub species is on average 3-4 and their quantity coverage goes up to 100%, which implies that thick bush coverage is in its natural stage. This vegetation not only creates a beautiful landscape that is always green but at the same time, it serves as a natural barrier against soil erosion, and even stands against the sea advancement toward the soft totally sandy hills.

In the meantime, the fissures on the walls of Castle of Rodon (Kalaja e Currilave, në Muzhlin e Skënderbeut) (cultural monument) are covered by typical wall vegetation which is very interesting and has been researched across the world for its natural special nature.

Fields around the Cape of Rodon
Photo: Arlind Veshti/Amfora Media

The entire area has a high tourism development potential because it holds natural, landscape, cultural, and historical values. As such, it is fragile and requires a lot of investment and interinstitutional cooperation.

As a recommendation for the development of marine and coastal protected areas, for the future, Albania has identified several Marine Protected Areas (MPAs) throughout its coastline and the Cape of Rodon is one of them.

An observation on the north part of the Cape of Rodon, Patok Bay, shows a limited number of points of interest due to the uniformity of the seabed (sandy and muddy) and the limited variety of its biocenosis.

The extension in the southern part of Cape Rodon, which continues with Lalzi Bay, is a better representative of the regional marine specifics of the Mediterranean Sea and fulfills the conditions to be a marine protected area because it also has a bio-construction area, thanks to the presence of Posidonia Oceanica meadows. A marine and coastal protected area focused on the Cape of Rodon can follow the best marine interests of the north and the south of the cape.

Threats and pressures at the Cape of Rodon

The Cape of Rodon mostly because of its geographical position is exposed to a series of different threats and pressures. On-sight observations have identified the pressures and threats:

- Urban wastes:

The Ishëm River is considered for many years now one of the most polluted in Albania when it comes to organic and chemical wastes and most of all its plastic waste. Tons and tons of plastic waste accumulated throughout its flow from Tirana, Vora, Kamza, Fushë-Kruja, and other areas

of Kurbin Municipality are discharged in the Adriatic Sea and “populate” the tight shores of the Cape of Rodon, where the “Currila Castle” Cultural Monument is located.

In 2017, the Ministry of Tourism and Environment undertook an initiative attempting to stop plastic waste from ending up in the Cape of Rodon, by constructing a plant that would gather such waste at the the Gotulla Reserve, near the village of Adriatik, which separates the Municipality of Durrës and Laç.Unfortunately, this plant is defunct today due to the lack of maintenance and disagreements between the local governments of the areas which are crossed by the river regarding its administration. As a result, the waste of Ishëm River continues to end up at the Cape of Rodon.

On the other hand, as a tourist destination, it is visited throughout the year by numerous tourists who throw their waste everywhere, sometimes even inside the Castle of Rodon.

Climate change

According to the Third National Communication of the Republic of Albania on Climate Change, the area of the Cape of Rodon – Turra Castle, has one of the most sensitive to climate change coastline ecosystems. The climate change effects are manifested in the increase in air temperature, drastic changes in precipitation, the increase of the average sea level, the change in river flows, etc. There is wide consensus among scientists that even if greenhouse gas emissions are drastically reduced, the sea level will continue increasing for some hundreds

The erosion of the earth on the top of the hill
Photo: Arlind Veshti/ Amfora Media

of years, which implies a powerful wave that will approach the shore and quick coastal erosion.

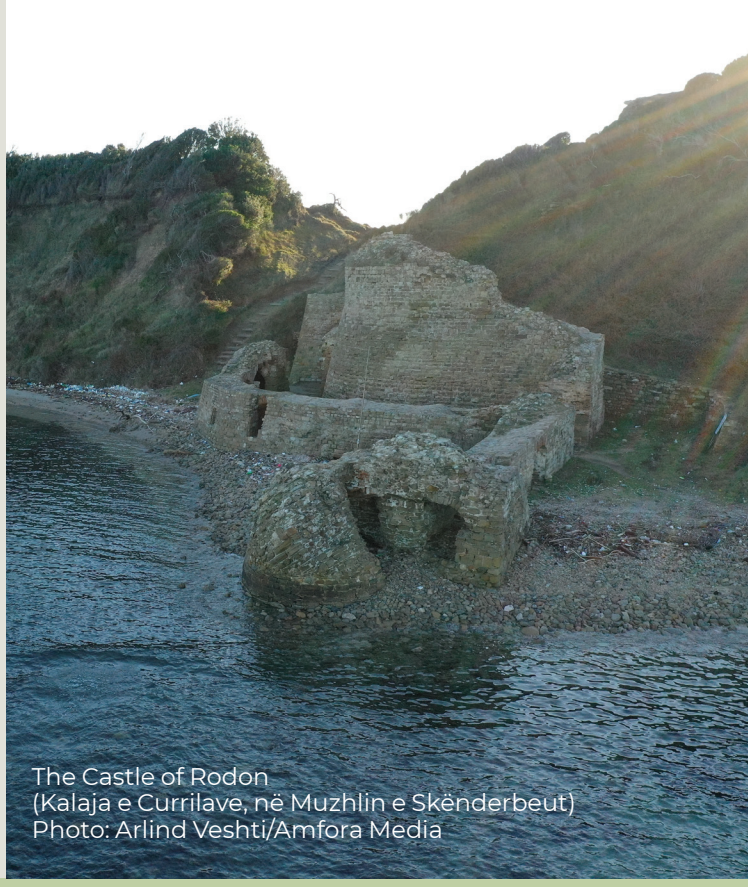
A regular visitor to the Cape of Rodon can notice through a simple observation the reduction of land and sea advancement in this tight coastal area. Considering that the rocks of this area are the softest possible, sandy rocks and the steepness of the rock is almost 90o, the sea advancement is expected to happen at an even faster pace.

Soil erosion

Soil erosion is also favored by the sandy nature of the unstable rocks, as well as the steepness of the slope which aids the occurrence of landslides. The vegetation of the cape is one of the counterfactors to erosion, considering that the roots of the vegetation keep the sandy rocky slopes united and stabilized. Neverthe-

less, presently, there is a destruction of vegetation due to cutting and unrooting, which has intensified erosion and landslides. The damage is an indicator of the vulnerability of the area, a warning of the erosive phenomena in the near future, and at the moment it has damaged the only pedestrian road which connects the castle to the cape.

Hence, the scale of exposure to erosion at the Cape of Rodon is very high which implies that this area is under serious pressure of disappearing from our territory as a land surface.



The Castle of Rodon
(Kalaja e Currilave, në Muzhlin e Skënderbeut)
Photo: Arlind Veshti/Amfora Media

How is the "Currila Castle" Cultural Monument of the First Category affected?

It is clear that the Cultural Monument is threatened by all environmental factors which affect the Cape of Rodon and it seems that it is in danger of disappearing within a brief period of time.

The Castle of Rodon is facing massive pollution from urban waste in the interior and exterior premises, as well as the surrounding maritime and terrestrial landscape. This does not only endanger the fauna, but it also decreases/shrinks in a notable manner the touristic values of one of the most beautiful areas in Albania. Climate change is added to the already problematic situation making the matters worse. The castle is in danger of collapse due to coastal erosion and being covered by water due to the rise of the sea level. At the present monument, due to the erosive work of the sea waters, part of the walls of the Castle of Rodon have sunk under the Adriatic Sea waters.

On the other hand, soil erosion and landslides, make land formation at Cape of Rodon unstable and hamper its access from the land route. Hence, the Castle is isolated and in the worst-case scenario, it will be separated, turning into an "island" in the middle of the water, which would make this cultural monument even more vulnerable to the climate change effects. The Castle of Rodon would sink and "crumble" in the water, drastically changing the surrounding landscape.

Hence, we, and above all, institutions, need to accept the fact that the Cape of Rodin is continuously under more and more exposure and more and more vulnerable to environmental changes.

Which could be the environmental solutions to preserve this cultural monument?

Wastes

In Albania, waste management is defined by Law No. 10463, 2011 "On Integrated Waste Management" which grants the local government duties for the management of waste in its administrative territory. This implies that the local government ensures logistics for the collection, cleaning, depositing, and neutralization of waste.

In the case of the Cape of Rodon, the situation is quite interesting because its maintenance, administration, and functioning as a natural monument site and as a cultural heritage site, should be done by several institutions that coordinate work with one another: 1) Ministry of Tourism and Environment through the Agency of Protected Areas for the management and preservation of the natural monument, 2) the Ministry of Culture through its Tirana Regional Directorate of Cultural Heritage, and 3) Durrës Municipality and others which contribute to addressing the waste issue of Ishëm River.

As a solution to the urban waste problem, which is mostly plastic that ends up at the Cape of Rodon through the Ishëm River, the solution presented by the Ministry of Tourism and Environment for the creation of a special plant that would collect waste at Gotull was very good, however, serious work should be done, so that this plant becomes functional once again while the maintenance and administration processes problem needs to be resolved.

Part of the Castle of Rodon
Photo: Arlind Veshti/Amfora Media

Recommendations:

- For the sustainable and effective solution to the problem of waste brought to Rodon by the Ishëm River, an interinstitutional group needs to be established, including the aforementioned stakeholders, so they separate their duties and responsibilities for the resolution of the problem

- Municipalities through the Ishëm River should seriously invest in the collection of waste through small facilities which would hamper their discharge into the river, especially in their rural areas where there are almost no waste management services.

- The Ministry of Tourism and Environment should cooperate with the Ocean Cleanup initiative[1] for the restoration and infrastructural improvement of the Godulla plant. Representatives from this initiative have now expressed interest to investing and monitoring this plant in Albania.

1 https://theoceancleanup.com/

As a solution for the problem of urban waste discharge in the Cape of Rodon area and at the Castle of Rodon interior and exterior premises, a good alternative is the education of citizens to take their trash with them. Why specifically this? Cultural and environmental institutions that work at the Cape monuments do not have the administrative duty of collecting trash. In the meantime, Durrës Municipality cannot send garbage trucks due to the harsh terrain. Hence, the whole situation is left in the hands of educated citizens. The focus of the campaign should be awareness raising so citizens understand that the trash thrown on the road and, in nature, fall under no institution's competence, but they are stipulated in the Code of Criminal Proceedings as an "Environmental Crime" and are punishable by fines. To implement such a campaign, all institutions should cooperate and make human resources available. Above all, they should cooperate with environmental organizations and the media which are key elements to this campaign, which should be followed with the placement of signs which read "Please take your trash with you" or "Please do not litter".

Plasitc Waste gathering from the Ishëm River Floodings
Photo: Arlind Veshti/Amfora media

Beware! This campaign could turn counterproductive if immediate and simultaneous measures are not taken to hamper the discharge of waste from the Ishëm River because the visual impact of an area full of waste on people is huge and make a sign which says do not litter look "silly".

Recommendations:

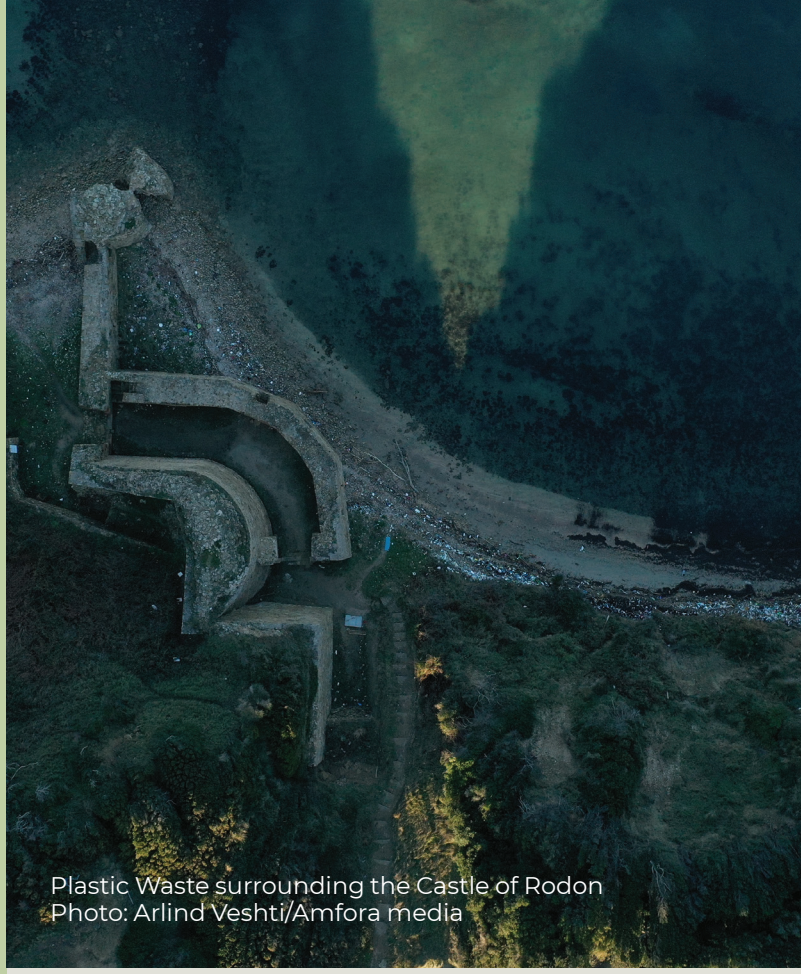
- Awareness-raising and educational campaigns should be coordinated by an environmental organization and through an interinstitutional team composed of ministers and Municipalities. This should happen because environmental organizations are equipped with people and are not affected by bureaucracies which would delay the action.
- No matter how long it takes to resolve the problem with the Ishëm River, the campaign should start and highlight the fact that a solution is being found for the waste discharged from this river. Special calls should address this major problem.

Climate Change

We need to understand that climate change affects the cultural values of the entire globe, especially the ones of the coastline areas. The Director of the Institute of Cultural Heritage in the United Kingdom, Woodside says: “If these coastal properties are to survive the coming decades, we will need to strengthen their walls and build sea defenses to protect them. It is for this reason that we are launching a public appeal to raise funds for this vital conservation work... I am certain that we can act now to take care of them for this generation. What concerns me is what will happen in the future. Our duty today is to do our best to ensure that the cultural heritages are maintained and we update all the existing coastal defenses.”

Nature-based Solutions (NBS) help society adapt to climate changes, while we improve the environment and save raw materials. Ecosystem-based Adaptation (EbA) was officially defined in the Convention for Biological Diversity, 2009, as the use of biodiversity and ecosystem services, as part of a global strategy to help people adapt to the negative effects of climate change. Thus far, researchers have shown that this way will not only decrease risk, but it will also boost environmental, economic, and social benefits.

This approach can be considered a favorable opportunity even for the mitigation of different climate change effects on the Cape of Rodon. An example from New York and Oosterschelde in the Netherlands is the construction of an artificial underwater reef with oyster shells that



Plastic Waste surrounding the Castle of Rodon
Photo: Arlind Veshti/Amfora media

has managed to mitigate waves and enable protection from erosion. Over time, these reefs can grow by blocking the sediments and in this way compensate for the rise of the sea level. Another example is the process of adding sediments near the shore which would allow the beach to regenerate itself, especially after a sea storm. It is worth highlighting that even in the cases when the natural collection is slower than the increase of the sea level, the natural solutions in general easily adapt and modify compared to the engineering solutions of walls made of concrete for the protection of the coast.

Recommendations:

- Natural solutions are dynamic and multidisciplinary. As such, they need to be well-thought at the resource and cause-effects level. The recommendation is that these solutions focus on the environmental policies for the restoration as a way out of climate change effects.
- The implementation of these solutions has many obstacles and reconceptualizations, hence real scientific and feasibility studies must be conducted for the affected areas such as the Cape of Rodon.
- The implementation models of the natural solutions at the Cape of Rodon should be drafted and implemented with international teams and the experience of different countries.
- A fund-raising campaign should be done for the conservation of cultural monuments from climate change impact.

Soil erosion

According to an article by Engineer Abdulla Diku, erosion management is one of the most expensive processes, however, in the case of the Cape of Rodon, the undertaking of bio-engineering measures is a must.

Solutions for soil erosion should be well-combined with the solutions to climate changes for the mitigation of the sea waves and the increase of sediments near the coast which would mitigate the blows from the waves on the steep sandy slopes, hence the measures will aim to bring stability at these slopes. As a parallel step, trees should be planted and natural vegetation should be added to the naked slopes and the areas where trees have been cut, unrooted, or burnt.

In the meantime, considering the large-scale and intense erosion, of the castle case and the current eroded slope of the cape, engineering solutions could be useful, however, we need to really evaluate the scale of the damage.

The Cape of Rodon
Photo: Arlind Veshti/Amfora Media

Recommendations:

- Monitoring and denouncements against perpetrators who break the law in general and those who destroy the vegetation coverage at the Cape of Rodon, in particular, should be intensified.
- Recovery of vegetation through intense tree planting campaigns should start as soon as possible.
- Coastal erosion and soil erosion should be targeted simultaneously as a single problem.

All the solutions to the aforementioned sub-issues become a necessity, especially when considering that the Cape of Rodon has been identified to be one of the marine protected areas.

The ruined stairs from the hill down to the castle
Photo: Arlind Veshti/Amfora Media

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CONTACT:
AMFORA CENTER
Address: Rruga “Aleksandër Goga”,
Pallati no. 795, Kati 2, Ap. nr. 4,
Durrës, Albania
Web: www.amfora.al
Email: qendraamfora@gmail.com

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