

Lamu Old Town Faces Mounting Pressures Under Climate Change and Large-Scale Infrastructure Development

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The World Heritage Committee is well aware of the threats to Lamu Old Town posed by the Lamu Port—South Sudan—Ethiopia Transportation Corridor (LAPSSET) large-scale infrastructure development project. As early as 2011, it expressed concern about the construction of the port component of LAPSSET, arguing that “the port project could be considered a mega-project” and that it was likely to cause severe ecological and social impacts that would threaten world heritage in Lamu.¹ Ten years later, with the first three of 32 planned berths of the port now complete, those predictions have already come true.



Fig. 1: A berth in Lamu Port.

Photo: Save Lamu

Save Lamu has included a discussion of the damaging effects of LAPSSET in the World Heritage Watch Report 2020,² and the situation has not improved since the publication of that analysis. Today, the combined impacts of LAPSSET and climate change, along with the State Party’s glaring neglect of its commitments under the World Heritage Convention, make including Lamu Old Town on the list of World Heritage in danger an urgent priority. These compounding threats are made even more pressing by the intimate relationship between Lamu’s cultural heritage and the integrity of its natural ecosystems.

1. The Nexus Between Ecology and Heritage in Lamu Old Town

One of the reasons why the World Heritage Convention is such a remarkable document is that it includes natural and cultural heritage under one unifying framework, declaring that the loss of either “constitutes a harmful impoverishment of the herit-

age of all the nations of the world” and including “the combined works of nature and man” in its definition of cultural heritage.³ The World Heritage Committee further specified in 2006 that “cultural heritage [can include] individual sites, buildings, or structures as well as urban or rural landscapes.”⁴ Taken together, these statements point to the profound truth that, in many places around the world, nature and culture are co-constitutive; one cannot thrive without the other.

This vision of the interdependence of nature and culture is certainly true for the residents of Lamu, who describe their relationship with the environment as having existential consequences:

Our environment has provided our communities with resources over the centuries. We are the guardians of our environment. We have utilized and conserved our natural resources, acknowledging their importance for future generations. Indeed, our cultural identity depends on it.⁵

For people in Lamu, then, damage to the environment is also and at the same time damage to identity and culture. This self-description by Lamu community members was even given legal recognition in 2018, when Kenya’s High Court ruled that the impacts of the LAPSSET port project on local ecosystems and fisheries amounted to a violation of residents’ right to culture.⁶

That nature and culture are intimately connected in Lamu is not only true in a general sense. It is also true of the specific criteria that justify Lamu Old Town’s inscription as a World Heritage Site.⁷ This justification is based on criteria (ii), (iv), and (vi) of the Operational Guidelines for the Implementation of the World Heritage Convention.⁸ Under criterion (ii), the inscription refers to “the architecture and urban structure of Lamu.” The buildings in Lamu Old Town are built with local materials, including sustainably harvested mangroves, and this building tradition continues today as a distinct architectural style.⁹ This architectural tradition can only continue while there is a steady supply of sustainable mangrove timber. Under criterion (iv), the inscription also describes Lamu as a locus of trade and “interaction between the Bantu, Arabs, Persians, Indians, and

Europeans.” While Lamu is no longer a center of international trade, some of these cultural dynamics persist to the present day. Local trade, especially in fish and other natural resources, still cements relationships among the many ethnic groups in the region and provides for peace amidst a background of great cultural diversity.¹⁰ These trading networks, and the cultural exchange they facilitate, will be severely threatened as their natural resource base is diminished.



Fig. 2: Traditional Lamu houses are built of coral rock and mangrove wood, with characteristic carved entrances. Mangroves are Lamu's primary source of wood but logging mangroves has become a controversial issue recently due to their important function for global climate.

Photo: Save Lamu

In addition to these direct links between nature and culture in Lamu, environmental damage also threatens the integrity of Lamu Old Town's cultural heritage by threatening the community that sustains and preserves it. The World Heritage Committee recognizes this possibility in its guidelines on climate change, describing places like Lamu as “living places, which depend on their communities to be sustained and maintained.”¹¹ In this context, and making specific reference to climate change, the Committee warns of “effects on social structures and habitats that could lead to changes in, or even the migration of, societies that are currently sustaining World Heritage sites.”¹² This type of outcome is very possible in Lamu, a community that is culturally and economically reliant on its natural resources, as the environmental impacts of LAPSET and climate change combine to create a perfect storm of socio-environmental degradation.

2. Compounding Threats: Climate Change, a Mega-Project, and an Ecosystem Under Pressure

Climate change and the mega-project known as LAPSET represent the most urgent and severe threats to the local environment in Lamu Old Town and its surroundings. Consider the coral reefs in Manda Bay, just a few kilometers from the World Heritage Site, and a key fishing ground on which the town relies. As global climate change has caused the world's oceans to warm, coral reefs have been one of the most affected ecosystems. When water temperatures become too warm, the symbiotic algae that live inside coral polyps leave in search of a more suitable host, causing the corals to turn white in a phenomenon known as bleaching. If temperatures remain high, the corals eventually die and are replaced by algae.

Mass bleaching events, unknown prior to 1998, are becoming increasingly common,¹³ and their negative impacts on fishery yields in Kenya are well-documented.¹⁴ As a result, coral reef conservation ought to be an extremely important priority in places like Lamu. Even so, rather than protect Lamu's coral reefs, Kenya's government has assaulted them. Just as ocean warming causes corals to bleach and die, dredging the channel for the LAPSET port has released sandy sediment into the nearby waters, effectively smothering the corals and leading to the same outcome.¹⁵ The additional pressures LAPSET has exerted on the coral reefs in Manda Bay is likely to kill them entirely if the project continues as it has begun.

Lamu's mangrove forests, which provide nursery habitat for commercially and culturally important fish species and provide timber for the distinct architectural style cited in Lamu's inscription as a World Heritage Site, are also threatened by both LAPSET and climate change. Lamu county is home to an estimated 35,678 ha of mangroves, 62% of all mangroves in the country.¹⁶ Virtually all of the coastal development planned under LAPSET will require the clearance of these forests. While planting new mangroves elsewhere is possible, there is no way to replace the ecological and cultural value of the forests that will be cleared. Mangroves in Lamu are also threatened by sea level rise, increased air temperatures, and an increase in the prevalence and severity of drought due to climate change.¹⁷ In the long term, the loss of mangroves will also make Lamu more vulnerable to coastal erosion due to rising sea levels and represent the loss of a very valuable carbon sink.¹⁸ Again, LAPSET and climate change are conspiring to threaten Lamu's future.

Surface and groundwater resources in Lamu face a similar dual threat. Their depletion could threaten the survival of the very community that sustains and protects the Outstanding Universal Value of Lamu Old Town. At the present moment, Lamu is already “on the verge of a freshwater crisis.”¹⁹ Under climate change, sea level rise will increase saltwater intrusion, shrink-

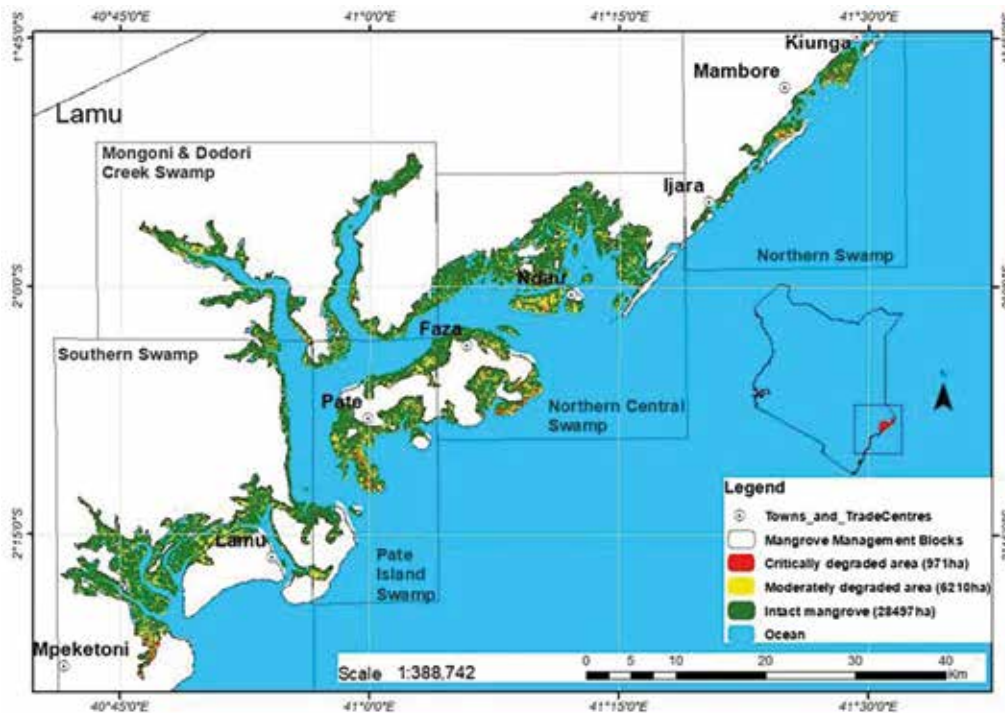


Fig. 3: Condition of mangrove forests in Lamu county.

Map source: <https://www.frontiersin.org/articles/10.3389/fgc.2021.709227/full>

ing the volume of Lamu's groundwater resources.²⁰ Increasing drought will shrink these resources even further.²¹ When this climate-induced stress is coupled with existing and future population growth associated with the LAPSET project, projections show that the Shela aquifer, on which Lamu Old Town relies, may entirely fail within five to ten years.²² While the government has proposed to install a desalination plant, there is no evidence those plans have been set in motion or will be completed in time to prevent the aquifer's collapse.²³



Fig. 4: A serious water shortage occurred in Lamu in 2021, enhancing fears that LAPSET could lead to more frequent such events in the future.

Photo: t47

3. An Urgent Situation Exacerbated by Negligence

The environmental pressures posed by LAPSET and climate change in Lamu are already quite severe, and they present a real and immediate danger to the Outstanding Universal Value of Lamu Old Town and the community that sustains it. As if these pressures were not enough, it is particularly disturbing that the State Party has provided no indication that it is meaningfully invested in protecting the cultural heritage of Lamu Old

Town. At a time when climate change already places Lamu's cultural heritage in danger, the State Party should be doing all it can to increase resilience and preserve cultural heritage. Instead, it is shamelessly pursuing a development project that has so far only intensified the threats faced by the local community.

At its 44th session, the World Heritage Committee noted that the State Party had still provided no management plan for Lamu Old Town that accounted for the LAPSET project.²⁴ This is despite the fact that construction has been ongoing since 2012, and that the first portion of the port was officially commissioned in 2021. In the same decision, the Committee requested the State Party to complete "as soon as possible" a revised Strategic Environmental Assessment (SEA) for LAPSET that would consider the impacts of the project and its subprojects on the Outstanding Universal Value of Lamu Old Town.²⁵ The State Party, however, is unlikely to comply with this request as it has a pending appeal in the country's court system in response to a judicial ruling that LAPSET violated the law by not producing an adequate SEA before beginning construction.²⁶ This appeal seems to signal the State Party's official position that it has no intention of producing an adequate SEA.

Finally, the Committee requested that the State Party create a forum in which LAPSET would work more closely with the community in Lamu.²⁷ Not only has the State Party failed to carry out this recommendation, but it has actively avoided consulting the community on any matters related to LAPSET. Community members report that they first learned about the project from news media.²⁸ Since then, the State Party has continued to exclude the community and has actively worked to sow misinformation and avoid fulfilling its legal responsibilities under environmental and constitutional law. Meanwhile,

the State Party has provided no evidence that it is interested in changing course.



Fig. 5: Save Lamu press conference demanding the protection of Lamu's ocean waters.
Photo: Save Lamu

4. Recommendations

The threats to the Outstanding Universal Value of Lamu Old Town posed by climate change and LAPSET are urgent and severe. We request that the World Heritage Committee take the following actions in its next session:

- *Add Lamu Old Town to the List of World Heritage in Danger pending the State Party's compliance with Decision 44 COM 7B.6, including a revised SEA and meaningful inclusion of the community in the decision making and planning processes of LAPSET.*
- *Request the State Party to provide resources for culturally appropriate and locally led adaptation to the impacts of climate change and LAPSET in Lamu Old Town and the surrounding region.*
- *Urge Kenya to develop only clean, renewable energy (solar, wind, wave, or geothermal) within 50 km of Lamu Old Town World Heritage Site, as per UNESCO's policy on world heritage and sustainable development.²⁹*
- *Review whether Kenya is acting in alignment with the goal of limiting global warming to less than 1.5°C above the pre-industrial average with the proposed construction of fossil fuel infrastructure as part of the LAPSET project, including a coal plant and an oil pipeline.*

Endnotes

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