

# Heritage Expert's Review of the Environmental and Social Impact Assessment Study Report for Proposed Palm Exotja Highrise Resort Project at Dabaso, Kilifi County, Kenya

Philip Mwasame Wanyama

*Coastal Archaeology, National Museums of Kenya  
P.O Box 82412 GPO 80100, Mombasa, Kenya*

**Abstract:** The study reviewed the Environmental and Social Impact Assessment (ESIA) study report for the proposed highrise resort development project in Kilifi County of Kenya. The proposal by M/S Palm Exotja Limited, P.O Box 347 Watamu, will involve the construction and operation of the ultra-modern tourist facility of 61 floors- Palm Exotja Highrise Resort at Dabaso, Watamu, in Kilifi County. This will be the tallest building in Kenya and perhaps in East African region. The ESIA study report prepared by Hannah M. Njoroge, Beatrice N. Karanja and Regina W. Gathuma (Registered EIA/EA experts), on behalf of the proponent was published by the National Environment Management Authority (NEMA). Comments were invited from the lead agencies and stakeholders on environmental management, as well as from the members of the public to register their concerns regarding this proposed development project. The national heritage resources in Kenya are protected by legislation and policies and wherever they are located, usually occur as part of the natural and human environment. This study was conducted as part of this EIA study report review process and culminated in National Museums of Kenya's raising concerns over the likely negative impact of the proposed project activities to the national heritage resources of the proposed project area. The data for this review study were gathered through literature review and fieldwork at the site of the proposed project, at Dabaso, in Kilifi County. The preliminary fieldwork carried out at the proposed project area and findings of the review of the Kenya's national legislation on heritage management, shows that the EIA study report does not address the possible negative impact of the proposed project to heritage resources of the study area. In conclusion, the study recommends that M/S Palm Exotja Limited carries out heritage impact assessment to address negative impact of the project activities to heritage of the study area. This study has implications not only, for the decision-making regarding the integration of national heritage concerns in the national development planning processes in Kenya, but also for the professional practice in heritage management authorities, institutions and individuals such as archaeologists, biologists, anthropologists, palaeontologists and historians among others, who have interest in the management of heritage resources.

**Key Words:** Environmental impact assessment, Exotja Highrise Resort, heritage impact assessment, national heritage, Dabaso, Kilifi County, Kenya

## I. INTRODUCTION

This article is the culmination of the review of ESIA study report for the proposed Palm Exotja Highrise Resort project (Njoroge, Karanja & Gathuma, 2019), conducted in June and July of 2019 by the Coastal Archaeology research team (from National Museums of Kenya). The proponent, M/S Palm Exotja Limited, P.O Box 347 Watamu, has planned to construct and operate the ultra-modern tourist facility of 61 floors- Palm Exotja Highrise Resort at Dabaso, Watamu, in Kilifi County (Figure 1 below graphically illustrates the proposed project). This study was an attempt, from the heritage management point-of-view, to consider what negative impact the implementation of this development proposal, would have to national heritage of the proposed project site. The formal meaning of the concept national heritage is derived from both the heritage legislation and the Constitution of Kenya. Kenya's heritage statute, *National Museums and Heritage Act 2006*, categorises national heritage into: 'cultural heritage' and 'natural heritage' typologies. The natural heritage typology includes: "natural features consisting of physical and biological formations or groups of such formations which are of outstanding universal value from aesthetic or scientific point of view; geological or physiographical formations of special significance, rarity or beauty among others" (Section 2, Government of Kenya, 2006). While 'cultural heritage' is defined as 'works of humanity or combined works of nature and humanity, and areas including archaeological sites which are of outstanding value from historical, aesthetic, ethnological or anthropological point of view; and includes objects of archaeological, palaeontological, historical interest and protected objects' (ibid.). The archaeological resource is classified as 'antiquity' and 'cultural heritage' and thus a protected resource wherever it is located, regardless of whether it is known or unknown to the heritage authority at the present. The word 'antiquity' refers to any movable object other than a book or document made in or imported into Kenya before the year 1895 or any human, faunal or floral remains of similar minimum age which may exist in Kenya' (Section 2, Government of Kenya 2006). With the enactment and promulgation of the new *Constitution of Kenya 2010*,

particularly in the Preamble and Section 42(a), the natural and human environment became another heritage typology which should be protected and sustained for posterity (Government of Kenya, 2010).

The practice of conservation and management of cultural heritage is founded on the notion that every parcel of land on the earth's surface has potential for containing cultural heritage resource until proven otherwise through scientific research (Drewett, 1999). Since cultural heritage assets are not only fragile, but also irreplaceable or non-renewable, development-led research or impact assessment study for heritage should be done for any developmental activity on the earth's surface that may threaten its survival. This can be at very small sites and very large ones beyond the criteria provided by *Environmental Management and Coordination Act's* (EMCA 1999), Second Schedule for development projects requiring EIAs in Kenya (Government of Kenya, 2019). In the case of heritage assets, the potential negative impacts of activities of a development project may include: destruction of context, damage of material objects, threats to authenticity and integrity, changes to physical setting and loss of heritage values among others. It is an obvious fact that natural and cultural heritage e.g., sacred places and sites, objects of archaeological, historical and palaeontological interests (antiquities), shipwrecks and geological formations occur within the natural and human environments. Some such heritage resources may normally be already known if gazetted as protected sites, monuments, objects and conservation areas. In other cases they may also be unknown, for example, archaeological, palaeontological and geological objects lying somewhere in their natural environment (waiting to be discovered by an archaeologist/ heritage manager) and thus deemed to be protected heritage. It is also an obvious fact that while EIA experts in their studies easily identify environmental baseline information e.g., biodiversity (fauna/flora), geology, climate, air quality, natural resources and other socio-economic factors, they tend to ignore or gloss over cultural heritage until at very late stages of the EIA processes when National Museums of Kenya, an archaeologist or heritage manager points it out (Wanyama & Wanjiku, *in press* 2019). In view of this argument, heritage impact assessment would seem a 'mandatory' requirement, for any development project, about to take place anywhere on the earth's surface both on land and in areas submerged underwater.

The main question of the study was whether any national heritage resource present at the site of the proposed Palm Exotja Resort project would be negatively impacted upon by the proposed project activities and what measures could be put in place, in order to mitigate those negative impacts. Thus, one objective of this work involved the review of ESIA study report (Njoroge, Karanja & Gathuma, 2019) and the existing heritage knowledge in documentary sources in the Coastal Resource Centre (at National Museums of Kenya, in Mombasa), in order to have an idea of the heritage of coastal Kenya region with focus on Watamu-Malindi area

(Figure 3). Literature review was followed by one day's field work involving surface surveying at Dabaso in Watamu, the proposed project site. The last objective was to make recommendations for mitigation of negative impact to national heritage of the proposed project area. This review of ESIA study report for proposed Palm Exotja project was justified as it enabled National Museums of Kenya to fulfill its statutory requirement as lead agency on environmental management and as the national heritage management authority by contributing to the planning of a development project. This requirement is spelt out in legislation and policies i.e. *Constitution of Kenya, 2010, Environmental Management and Coordination Act 1999, Environmental Impact Assessment and Audit Regulations, 2003, National Museums and Heritage Act, 2006* and *Physical and Land Use Planning Act, 2019* (Government of Kenya, 2010; 1999; 2003; 2006; 2019). In addition, this study was inline with international best practice standards, for example, the operation policy guidelines (OP 4.11) of the World Bank, which safeguard physical cultural resources during the planning of a development project (World Bank, 2012). The study was also justified because it had the potential of generating new knowledge about the national heritage of the proposed project area.

This study has established that the national heritage resource was not adequately assessed as one of the baseline factors of the natural and human environment in the ESIA study report for the proposed Palm Exotja project. As a result of this, the proposed Environmental and Social Management and Monitoring Plan (ESMMP), does not provide mitigation measures against the likely negative impact to heritage of the project area, as required by relevant Kenyan legislation and policies. It is recommended that the proponent, M/S Palm Exotja Limited, should liaise with National Museums of Kenya and carry out heritage impact assessment and rescue the movable heritage assets, before implementing the construction phase of the proposed development. Figure 2 below locates the study area - the site of proposed Palm Exotja Highrise Resort project. Figure 3 shows the location of some known and protected national heritage sites within Kilifi-Malindi area along the coastal Kenya region. The subsequent chapter on the study material and methods describes the subject/object of this study, as well as the methods and techniques used in data gathering. The chapter on results will present the findings of this study starting with the information about legislation on protection of Kenya's national heritage, followed by description of the proposed Palm Exotja project. This chapter will end with results of fieldwork conducted at Dabaso, in Watamu. The chapter on discussion will examine the results of the review against the legislation and policy requirement and the global best practices of both environmental and heritage management. Finally, the chapter on conclusions and recommendations provides a summary of the study findings and the recommendations for the proponent of Palm Exotja project, the local professionals, national heritage and environmental management authorities.





### Material

As already stated the material for this study was the *EIA 1600 Highrise Resort Kilifi County.min.pdf*. This document is an environmental and social impact assessment (ESIA) study report for the proposed Palm Exotja Highrise project (Njoroge, Karanja & Gathuma, 2019). The report was published and circulated to the lead agencies and stakeholders for review and comment on it by National Environment Management Authority of Kenya (NEMA). The second material of the study was the site(s) of the proposed project, as well as the related project activities (for example, the sources of construction material in Tezo and Mjanaheri and off-site kitchen waste disposal site at Chakama), in Kilifi County. The location of the project at Dabaso near Watamu town is approximately 110 km north east of Mombasa and 24 km south east of Malindi town (see Figure 2). This is within the coastal Kenya region (the former Coast Province of Kenya). The project site is on the coastal plain about 300 metres away from the high water mark at the beach. To the east and north-east is the Indian Ocean where are to be found the Watamu and Malindi National Marine Parks and Reserves, both gazetted in 1968 as the first Marine Protected Areas in Kenya under *Wildlife Conservation and Management Act* (Government of Kenya, 1985). In addition, it was designated as UNESCO Biosphere Reserve in 1979 (Unesco, 2021). Therefore, in terms of biodiversity conservation, the project area is situated within the 'transitional zones' (which consist of mainly a terrestrial area) of the Malindi-Watamu Biosphere Reserve. The word 'biosphere', according to the *Oxford English Dictionary* is "the part of the earth's surface and atmosphere in which plants and animals can live" (Hornby, 2015:137). On the other hand, the term 'biosphere reserves' according to the UNESCO world wide web are elaborately defined as:

(...) learning places for sustainable development. They are sites for testing inter-disciplinary approaches to understanding and managing changes and interactions between social and ecological systems, including conflict prevention and management of biodiversity. They are places that provide local solutions to global challenges. Biosphere reserves include terrestrial, marine and coastal ecosystems.

Each site promotes solutions reconciling the conservation of biodiversity with its sustainable use. Biosphere reserves are usually nominated by national governments and remain under the sovereign jurisdictions of the states where they are located. They are designated under the intergovernmental Man and Biosphere (MAB) programme by the Director General of UNESCO, after the decision making by MAB International Coordinating Council (MAB-ICC) (...)

Biosphere Reserves involve local communities and all interested stakeholders in planning and management. Three main functions are integrated: conservation of biodiversity and cultural diversity, economic development that is socio-culturally and environmentally sustainable and logistic

support underpinning development through research, monitoring, education and training (...) (Unesco, 2021).

Located to the south of the project area is the Mida Creek with fringing reefs, seagrass beds and associated mangrove forest conservation areas and to the northwest, is the Arabuko Sokoke Forest which is protected under *Forest Conservation and Management Act* (Government of Kenya, 2016). The latter is considered as part of the remnants of the ancient forests that covered the Eastern Arc Mountains and the coastal areas in Mozambique, Zanzibar, Tanzanian mainland and Kenya (Burgess *et al.*, 2003).

In terms of cultural heritage potential, the Kenya coastal region boasts of over 120 sites of known archaeological, historical and monumental heritage of national significance and protected under the *National Museums and Heritage Act* (Government of Kenya, 2006). Along the Kenya's coastal stretch of about 600 km and on the off-shore islands are to be found the ruined Swahili towns that are dated to between 8<sup>th</sup> and 17<sup>th</sup> Centuries in the Christian Era. For instance between Kiunga at Somalia-Kenya border in the north and Vanga at Tanzania- Kenya border in the south, there are about 80 known cultural heritage properties - the Swahili ruined town sites and the Portuguese fortress - Fort Jesus Mombasa (see, e.g., Katana & Abungu, 1995:157; Wilson, 1980; 1978). Two of these monumental sites were inscribed in the UNESCO World Heritage List: Lamu Old Town (in 2001) and Fort Jesus Mombasa national monument (in 2011) respectively (Unesco, 2001; 2011). Besides, close to the coast and in the immediate coastal hinterland are also to be found natural and/or mixed heritage properties - the Sacred Mijikenda Kaya Forests totaling over 60 in number, out of which 36 were nominated to UNESCO for evaluation and listing in World Heritage List (National Museums of Kenya, 2006). In 2008, a group of eleven of these separate Sacred Kaya Forests were selected and inscribed in the UNESCO World Heritage List (Unesco, 2008). As shown in Figure 3, the area around Malindi and Watamu (the proposed project area) has numerous known sites of documented archaeological ruins such as Uyombo, Kilepwa, Mgangani, Mida Creek, Kiburugeni (Kiburujini), Watamu Mosque, Mambrui and Gede historical monument (see, e.g., Wilson, 1980; Kirkman, 1954; 1963; 1964; Martin, 1973; 1970). Furthermore, there is potential for likely unknown heritage sites with objects of archaeological and palaeontological interests which may occur anywhere in the natural environment, for example, on the undeveloped parcels of land in the proposed project area.

### Methods

This research work employed two methods of data collection: review of literature and fieldwork at the proposed development project site at Dabaso near Watamu, as discussed in the following sub-sections.

### III. LITERATURE REVIEW

Literature review is a method of research which involves the location, reading and evaluation of the previous studies and

documented reports (Mugenda & Mugenda, 1999:14). The review of the ESIA study report for proposed Palm Exotja Highrise Resort prepared by Njoroge, Karanja & Gathuma, 2019, was done on 6<sup>th</sup> of June 2019 at Coastal Archaeology Department and Coastal Resource Centre (National Museums of Kenya, Mombasa). The front matter which includes the 'Executive Summary' consists of 23 pages (pp.i-xxiii), while the main report from 'Introduction' to 'Conclusion and Recommendation' chapters is covered in 156 pages (pp 1-156). This review enabled the research team to obtain information concerning the proposed Palm Exotja Highrise development project i.e. the description of the development including: the EIA study methodology, identified impacts in the EIA study, their suggested mitigation measures and gaps in addressing negative impact to cultural heritage. Second, the team reviewed the existing Kenya's national heritage legislation, to provide the requisite legal and policy knowledge about the national heritage management and impact assessment practice in the country. In this case, the team's main focus was on the two principal sets of legislation: the *Constitution of Kenya* (Government of Kenya, 2010) and the *National Museums and Heritage Act* (Government of Kenya, 2006). Literature review is one of the research methods recommended in the scientific research work including in the social sciences such as this present study (Mugenda & Mugenda, 1999).

#### *Fieldwork*

Fieldwork for this research was conducted on 11<sup>th</sup> of July 2019 at the proposed project site at Dabaso area, in Watamu, Kilifi North Sub-county, in Kilifi County (Figure 2). The National Museums of Kenya's Coastal Archaeology research team's entry to the project site was permitted by the agents of the project proponent who were present at their property. The archaeological ground surveying was applied in order to collect preliminary data at the study site. This involved the field team walking through the site, making visual observation and noting the occurrence of heritage evidence on the surface (for details on this technique see, e.g., Drewett, 1999:42-50; Peregrine, 2001:48; Hagget, 1965). The project site is composed of two parcels of land separated by wall-fence with recently cleared vegetation. To ensure speedy and extensive coverage of the site, observed surface phenomena were recorded using a combination of written notes, Global Positioning System (GPS) and photography (see Table 1). One limitation however of this fieldwork is that due to time constraints, the team did not manage to explore the proposed sources of construction materials i.e. stone and sand quarries at Tezo and Mjanaheri, as well as the off-site kitchen waste disposal location at Chakama. This limitation was however overcome by availability of information about archaeology and cultural heritage of the coastal Kenya region and Kilifi County (proposed project area) in documentary sources.

#### IV. RESULTS

This chapter of the article presents the study findings starting with legislation protecting Kenya's national heritage,

description of the proposed Palm Exotja project and the results of fieldwork at the project site Dabaso near Watamu town.

#### *Protection of Kenya's national heritage in legislation*

The legislation for protection and conservation of Kenya's national heritage assets derives mainly from the *Constitution of Kenya 2010* and *National Museums and Heritage Act 2006*. On one hand, the Constitution of Kenya, in the preamble, for example, treats the environment as 'national heritage' which forms the basis for sustainable development when it states that: "We the people of Kenya (...) Proud of our ethnic, cultural and religious diversity, and determined to live in peace and unity as one indivisible sovereign nation (...) respectful of the 'environment', which is our 'heritage', (emphasis is mine) and determined to sustain it for the benefit of future generations (...) Adopt, enact and give this Constitution to ourselves and to our future generations. God bless Kenya (Preamble, Government of Kenya, 2010). Here, it can be observed that the Constitution has created the 'natural and human (built) environment' as the new heritage typology. On this account the natural environment as it exists in the present time period should be protected and conserved for posterity. Also, the recognition of 'culture' as the foundation of the nation and cumulative civilisation of the people and the nation can be noted in the Constitution (see, e.g., section 11, Government of Kenya, 2010). This implies that the heritage of humankind can be traced back to the most remote past in prehistory and is continually being created and recreated, being produced and reproduced in the present and in future. In other words culture is a transient entity. In addition, it is a national resource the state is tasked to promote, for instance through forms of expression such as literature, the arts, science and museums. Further, in Section 42(a) the Constitution raises the 'environment' to the level of a human right so much that, a clean and healthy environment, together with all actions aimed at its protection and conservation for the present and future generations, is a fundamental human right (Government of Kenya, 2010).

On the other hand, the National Museums and Heritage Act, is the second source of legislation on national heritage protection and conservation (Government of Kenya, 2006). The statute consolidates the law concerning national museums and heritage and provides for establishment, control, management and development of national museums and the identification, protection, conservation and transmission of the cultural and natural heritage of Kenya by repealing the *Antiquities and Monuments Act 1983*, (Government of Kenya, 1983a) and *National Museums Act 1983* (Government of Kenya, 1983b). This statute establishes National Museums of Kenya, as a state corporation with the mandate to manage natural and cultural heritage and national museums in the country. With regard to relationship between development and heritage management, one of NMK's functions is: "to promote cultural resources in the context of social and economic development" (Government of Kenya, 2006). In

addition, one of its powers has to do with sustainable environmental management. It states that “subject to provisions of *Environmental Management and Coordination Act 1999*, conduct environmental impact assessments” (section 5(1n), Government of Kenya, 2006). This is a brief statement of law which indicates that impact assessment on ‘heritage’ of a proposed development project site is subsumed in the policy guidelines for EIAs (see, e.g., Government of Kenya, 1999; 2003).

#### *Description of the proposed Palm Exotja Highrise Resort Project*

The ESIA study for Palm Exotja project involved desktop study of published information, plans, maps, and both national and international legislations and government policies, as well as field studies which included actual visits at the project site to gather data on biophysical, socioeconomic environment and identification of environmental impacts. For impact assessment the experts used multi-disciplinary methods under physical/chemical, biological/ecological, sociological/cultural and economic and operational components. The public consultation and stakeholder engagement involved the team holding three public meetings, formal meetings with key stakeholders and settlement/village meetings. The ESIA team also held one-on-one interviews and Key Informant Interviews to collect information on specific or professional issues (Njoroge *et al* 2019:6-7).

The proposed Palm Exotja project will be a mixed-use iconic high-rise resort facility of 61 floors and 380 metres high, probably the tallest building in Kenya. The location of the project site is on the L.R No., Gede/Kirepwe B/369, Turtle Bay Road at Dabaso, Kilifi North, in Kilifi County (see Figure 2). The actual piece of land measures 2.4 acres currently undeveloped and the constructed area will comprise a total of 209026 square metres (see Figure 1). Apart from, the high-rise tower, there will be built a parking and service building of five storeys each, the waste water treatment plant, two boreholes, a helipad and underground water reservoirs, boundary wall, drainage works and other associated facilities. This project area is situated within the Physical Planning Department (Government of Kenya) zonation area set aside for agricultural production activities. The project proponent will require a permit for change of use for the land the site (ibid.:10). It is estimated the proposed Palm Exotja project will cost Kenya Shillings 28,000,000,000.00 (US Dollars 280,000,000.00) and this seems a very huge investment.

The ESIA study report describes the environmental and social economic baseline information including biodiversity, geology and landscape, bioclimatic and social and economic conditions of the project area. Biodiversity in the proposed project area are to be found mainly in the Malindi and Watamu Marine Parks and Reserves (MWMPR), which were established in 1968 as the first Marine Protected Area in Kenya. In 1979 both were designated as Malindi-Watamu UNESCO Biosphere Reserves. The Watamu Marine National Park and Reserve (WMNP) which protects coral

reefs, seagrass beds and mangrove swamps and numerous intertidal habitats is at close proximity to the site of the proposed project. In 2018 WMNP was reported to have 407 fish species, echinoderms 34, mollusks 60, crustacean 23, seagrass 11, coral genus 43. Out of these 23 species in WMNP are listed in the International Union of Conservation of Nature (IUCN) Red List. Whereas some of species are vulnerable, some others are endangered. To the southern part of WMNP, is Mida Creek which forms part of the WMNP Reserve. It has habitats for seven mangrove species (out of the nine species that are found in the Western Indian Ocean region). Mangroves provide roosting and feeding sites for various bird species and habitats for the rare crab plover, nursery grounds for fish, lizards, snakes and mammals such as monkeys, foxes, raffles and wild pigs (ibid.:16-24).

The project area is geographically positioned in coastal region of Kenya within the Mozambican geological systems composed of limestone rocks, silty sand soil and characterised by a plain topography (ibid.:24). The landscape is classified into three types: beach, coral landscape and plateau. The beach is characterised by coral cliff, sandy soil and unstable new dune formation. Coral landscape consists of higher situated old reefs and lagoons which are characterised by depressions with clayish soils and some areas susceptible to water-logging. Plateau landscape is a prominent area of shallow sandy clay soils underlain by coral limestone rocks (ibid.:25). The soils of the area are well drained, very deep, yellowish red, very friable, range from fine sandy loam to fine sandy clay (ibid.). The climate of the project area is monsoon that is hot and humid throughout the year. It is hot and dry between January and April; cool and wet between May and September. In the coastal lowlands, the average annual temperatures range from 22<sup>o</sup>C to 27<sup>o</sup>C; in the coastal upland areas it ranges between 30<sup>o</sup>C and 40<sup>o</sup>C. The area experiences two rainfall seasons: the long rains in March-June period and short rains in October-December period (ibid.).

In addition, the ESIA study report also describes the social and economic baseline of the proposed project including the geographic area, demographics, resources, project site neighbourhood and fishing activities. The geographical area of Kilifi County is 12, 639 sq.km (out of which 109 sq.km is water mass in the Indian Ocean). The population of the county is 1,109,735 persons and 350,450 households. The population density is 450 per sq.km (based on 2009 Kenya Population Census). The natural resources in the project area include natural minerals such as iron ore, titanium and manganese. Other natural resources in the Kilifi County are Arabuko Sokoke Forest, Mangrove Forests (mainly in Mida Creek), Rivers Sabaki/Galana, Kafuloni and Rare and the Indian Ocean. The economic activities in the project area include agriculture, tourism, fishing and manufacturing. The project site at Dabaso is located in Watamu – a small coastal town with few commercial activities. The neighbourhood of the site to the northern side of the project site borders a small residential area and Watamu shopping centre. To the south east is the Turtle Bay Road



which is the main access road to the proposed project. Eastern side are located the first row of hotels and luxury villas which are accessible from the beach. To the south and west are residential areas, the Dabaso Creek and Prawn's Lake, some bushes and tropical trees. The project site was originally zoned as an agricultural production area (ibid.:26). Fishing is one of the most significant economic activities for members of the local community in the project area, although there is decline in fish catches. In Watamu and Mida Creek fishing is mainly for subsistence, commercial sporting and bait harvesting. In early 2010s there were between 250 and 500 registered fishermen who depended on Mida Creek ecosystem for artisanal fishing. Sport fishing is carried out by registered tourist clubs (ibid.).

The ESIA study reviewed various legislation and policies on environmental management, national development, marine and wildlife conservation, traffic, health safety, employment and labour, as well as the World Bank's policy standards regarding development project planning among others. However, Kenya's legislation for protection of national heritage and culture was not reviewed. This may be because culture and heritage did not seem important to the project planners. Moreover, ESIA study report mentions the adherence to the World Bank Standards (Performance standard 8, that concern safeguarding of cultural heritage at the proposed development site). The ESIA experts appear to have confused conservation of biodiversity in protected areas such as forests, national parks and reserves (an aspect of natural heritage) with protection of cultural heritage assets which is also guided by World Bank's operational policy (OP 4.11). This policy safeguards physical cultural resources as part of Environmental Assessment (EA), in case the proponent will request funding from the World Bank (World Bank, 2012).

Further, the ESIA study report makes a point with regard to archaeological and other cultural properties (Njoroge *et al.*, 2019:111). It indicates that field observation did not record any archaeological artifacts at project site. Here, we have no idea whether the ESIA team engaged a qualified archaeologist to do the field observation and if they involved the National Museums of Kenya while doing this work. The ESIA study team held public consultation and stakeholder engagement in three meetings at different times (Njoroge *et al.*, 2019:86). However, none of the National Museums of Kenya personnel or representative either from Mombasa, Kilifi, Gede or Malindi attended any of those meetings. Thus, national heritage sector concerns were not incorporated in the planning of the proposed project.

The ESIA study report describes the anticipated potential positive and negative impacts to the environment throughout the life cycle of the proposed development. Among the positive impacts of the project are: creation of employment opportunities, promotion of tourism in the area, provision of market for local goods and minerals, growth of businesses, improved livelihoods, generation of revenue and

economic growth (ibid.:99). This appears to be good for the country's socio-economic development that any one should support. Some of the anticipated negative impacts of the project include: loss of vegetation cover during construction phase of the project, generation of solid waste, air degradation, impact on marine life, alteration of natural drainage systems, fire and disaster risk interference with social and cultural set up of families and changes in demographics of the area (ibid.:101). As it is, ESIA study has perfectly captured the likely environmental negative impacts on the baseline factors of the area, for instance the marine and terrestrial biodiversity of the project area. Although heritage resource (which was supposed to be part of these baseline factors) of natural and human built environment was given little attention. ESIA study report recommends that proposed project be approved since the identified negative impacts could be mitigated.

The proposed Environmental and Social Management and Monitoring Plan (ESMMP) in ESIA study suggests that the project contractor can put in place 'chance find procedure' at no extra cost so long as they liaise with the National Museums of Kenya when it states that: "the contractor should develop and implement 'a chance to find the procedure' (emphasis mine) in case archaeological sites are found during the construction process. Such a procedure must incorporate liaison with the National Museums of Kenya" (ibid.:139). In our view the ESIA study team should have sought the correct information from relevant heritage authority or an archaeological heritage expert. The archaeological and heritage research work for a development project involving testing through survey and salvage/rescue archaeology work and analysis, as well as long-term storage of the recovered material assemblage requires the project proponent to incur some additional costs.

#### *Fieldwork at Project Site: Dabaso, in Watamu*

Fieldwork was conducted on 11<sup>th</sup> of July 2019, at Dabaso in Watamu on the core project site of proposed Palm Exotja project by Coastal Archaeology personnel from National Museums of Kenya. The team found that the proposed project will be sited on two parcels of land separated by a wall fence (Plot 1 & Plot 2). As shown in Table 1, Plot 1 is located at GPS coordinate: Latitude S 03<sup>0</sup>21.801' and Longitude E 039<sup>0</sup>59.986'. It has an existing storey building at the front with evidence of recent bush clearance and occurrence of coral rock structures (see, e.g., Figures 4, 5, 6, 7 and 8). Our observation of the site revealed there is possibility of the coral rock structures containing fossil or sub-fossil which may be exposed during construction phase. While Plot 2 is situated at GPS coordinate: Latitude S 03<sup>0</sup>21.803' and Longitude E 039<sup>0</sup>00.019' as indicated in Table 1. The visual foot-walk survey identified the presence of coral rock structures, faunal shell remains (eco-facts) and occurrence of 'humps' and 'bumps' suggesting the likely past man-made modification on the surface that appear like an archaeological mound at Latitude S 03<sup>0</sup>21.822' and Longitude E 039<sup>0</sup>00.043' (Figures



9, 10 and 11 respectively). This suggests that Plot 2 site may have high potential for heritage resource, and therefore should be probed further archaeologically through scientific excavation before the implementation of the construction phase of the proposed project. Further, the construction material sources in Tezo and Mjanaheri, as well as the off-site kitchen waste disposal site in Chakama should be archaeologically explored to in form further planning of the proposed development.



Figure 4. The existing development on Plot 1 at the proposed development project site at Dabaso. Photograph by Mohamed M. Chiguyaso.



Figure 5. The existing natural condition on Plot 1 at the proposed development project site at Dabaso. Notice the wall structure dividing the proposed development project site. Photograph by Mohamed M. Chiguyaso.



Figure 6. The existing natural condition on Plot 1 at the proposed development project site at Dabaso. Notice material from geological drilling and undisturbed area with vegetation to the southwest extent of Plot 1. Photograph by Mohamed M. Chiguyaso.



Figure 7. The existing natural condition on Plot 1 at the proposed development project site at Dabaso. Notice the vegetation, partially exposed coral structures and southwest area amenable to archaeological study. Photograph by Mohamed M. Chiguyaso.



Figure 8. The existing natural condition on Plot 1 at the proposed development project site at Dabaso. The close-up view of coral rock formation which may contain fossil record. Scale: 30 cm. Photograph by Mohamed M. Chiguyaso.



Figure 9. The existing natural condition on Plot 2 at the proposed development project site at Dabaso. Notice the natural coral outcrop. Photograph by Mohamed M. Chiguyaso.



Figure 10. The existing natural condition on Plot 2 at the proposed development project site at Dabaso. Notice the probable archaeological humps and bumps suggesting archaeological heritage potential at the site. Photograph by Mohamed M. Chiguyaso.





Figure 11. The existing natural condition on Plot 2 at the proposed development project site at Dabaso. Notice the surface faunal shell suggesting likelihood of eco-facts and faunal remains at the site. Photograph by Mohamed M. Chiguyaso.

## V. DISCUSSION

This study sought to establish whether any national heritage resource of the project area would be negatively impacted upon by the proposed project activities and what measures to be put in place in order to address them. Both ESIA study report (Njoroge *et al.*, 2019) and fieldwork carried out at Dabaso, have shown that although the core project site at Dabaso is partly developed, most of it is undisturbed and the project area is situated in the ‘transitional zones’ of the Malindi-Watamu UNESCO Biosphere Reserve. In fact, just recently in June 2019, the Arabuko Sokoke Forest was also designated the UNESCO Biosphere Reserve and was merged with Malindi-Watamu to form the Malindi-Watamu-Arabuko Sokoke Biosphere Reserve (Mwang’ombe, 2019). This makes the proposed project area a very important natural and human environment conservation area (an element of natural heritage). Also, fieldwork conducted at the core project site, recorded coral outcrops and the probable archaeological mounds in Plots 1 & 2 (for illustration see, e.g., Figures 4-11). The available literature clearly shows that the project site is situated in the locality that has numerous scattered known protected heritage sites dotting the coast and along the creeks and on the islands. Figure 3 locates these known heritage sites that consist of mainly ruined Swahili towns: Gede National Monument, Kiburujini Mosque, Watamu Mosque, Uyombo, Mida Creek and Kirepwe (Wilson, 1980; Kirkman, 1954; 1963; 1964; Martin, 1973; 1970). It is therefore possible the core project site at Dabaso (Plot 1 & 2) may have potential for objects of archaeological and palaeontological interests and as we have already mentioned in literature review they are protected objects whether they are known or not (Government of Kenya, 2006; 2010).

Concerning the current natural and human environment at the core project site, the proposed development will completely change the physical setting and skyline of the project area during construction and operation phases. This change will be irreversible and as heritage practitioners we recommend the digital photographic and videographic documentation of the project site i.e. before,

during and after completion of development project. This work should be done by national heritage authority (National Museums of Kenya). The documentation that results from this work will be stored as public record for reference, dissemination, study and for posterity. As we have already stated in the literature review, this requirement is inline with Constitution of Kenya 2010 (Government of Kenya, 2010).

It is notable that the proposed project will require bulky construction materials which will potentially impact on other sites far away from the core project site at Dabaso. For instance, the sites proposed as potential sources of construction stones at Tezo (near Kilifi town) and sources of sand at Mjanaheri on the north bank of Sabaki River could affect archaeological heritage resources judging from existing literature. In the late 2010 and early 2011, archaeologists Herman Kiriamia and Qin Dashu working under the Sino-Kenyan Archaeological Research Project in Malindi area, recorded archaeological sites at Mambrui Old town (Kiriamia & Dashu, 2014). Similarly, Caesar Bitu’s Master of Arts Degree research Project in Malindi area identified and recorded numerous archaeological heritage sites, for instance, at Chemi Chemi near Angel’s Bay Resort and Mjanaheri localities (Bitu, 2012). The site proposed as the location of an off-site kitchen refuse disposal site at Chakama further in-land to the west of Malindi town will also impact on the heritage of the area. Based on this knowledge we can predict the likelihood of the sites with physical cultural resource in the area proposed as stone and sand quarries and off-site kitchen refuse disposal site. Before implementation of the project, the area should be archaeologically explored to record and safeguard physical cultural resource since they will undergo tremendous modification and therefore the loss of archaeological resource.

Our literature review has also found that ESIA study ignored legislation protecting national heritage in Kenya (National Museums and Heritage Act 2006) and chose to use the World Bank’s Standards (Performance standard 8, that concern safeguarding of cultural heritage at the proposed development site). Unfortunately, the discussion is limited to safeguarding of biological diversity only which is very well safeguarded by the Marine Protected Areas (National Parks and Reserves) as we have already stated in literature. The report ignores the possibility of negative impact to archaeological, palaeontological and even geological heritage in the proposed project site. In our view, the ESIA study should instead have considered the World Bank’s operational policy (OP 4.11) which safeguards physical cultural resources during the planning of a development project (World Bank, 2012). This policy provides that for the proposed projects that will request funding from World Bank, their proponents must conduct Heritage Impact Assessment (HIA), separately from Environmental Assessment (EA) at the earliest stages of the project planning process. As observed elsewhere in this article, in the Kenya’s domestic/municipal legislation, and policy framework, the ESIA report failed to recognize the national heritage statute, National Museums and Heritage Act,

2006 which protects all heritage resources in Kenya and ensures counterpart heritage impact assessment for proposed development projects is conducted (Government of Kenya, 2006). In addition, environmental law EMCA 1999 lists National Museums of Kenya as one of the Lead Agencies on environmental management (Government of Kenya, 1999; 2003).

Furthermore, ESIA study team's argument that field observation did not record archaeological sites raises the question that: 'were these ESIA experts qualified to work as professional archaeologists and heritage managers? The determination that the site 'has' or 'does' not have archaeological resource is the task that should be undertaken by a professional archaeologist. Such work must involve proper empirical research that incorporates archaeological testing methods at the proposed project site by a qualified archaeologist/heritage management practitioner and not by any other professional. Also, the research operation itself is a protected/regulated activity, normally permitted by exploration licence from the government (through the National Museums of Kenya). As already mentioned, during planning phase the counterpart heritage impact assessment is required to be conducted to assist in further planning and mitigation of negative impact to national heritage.

The proposed ESMMP in the ESIA study report recommends the 'chance find procedure' for the project contractor, in case of accidental discovery during the implementation of the construction phase (the text of the procedure missing in the ESIA study report). Whatever this means, the correct policy procedure will require the proponent to ensure heritage impact assessment (HIA) is done before implementation of construction phase of the development project. (The HIAs are usually some sort of a counterpart assessment study to EIA/ESIA studies that inform the proponents whether the proposed project sites have any heritage resources.) It will then inform the proponent on how to mitigate the negative impact to the identified heritage resource. After this the contractor can be instructed on how to mitigate 'accidental' heritage resource discovery during construction. This study is done by National Museums of Kenya at an extra cost of the proponent following the national guidelines governing environmental impact assessments (Government of Kenya, 1999; 2003).

Regarding the public consultation and stakeholder engagement, the ESIA study team held three public hearing meetings, as well as one-on-one surveys and Key Informant Interviews on particular professional issues as shown in literature (Njoroge *et al.*, 2019). The involvement of the public and stakeholders in the EIA processes is well provided for by the Constitution of Kenya 2010, EMCA 1999 and the EIA/EA Regulations 2003 (Government of Kenya, 2010; 1999; 2003). However, the National Museums of Kenya personnel who could be found in Mombasa, Kilifi, Gede and Malindi heritage centres were not involved. Among the stakeholders including the national government agencies, County Government of

Kilifi, the Members of Parliament and Members of County Assembly from the project area and project area residents, there were those who supported and those who opposed the project. Those who were thought would oppose were not invited for any of the public hearing meetings. Just like National Museums of Kenya, other stakeholders like Watamu Residents Association and biodiversity conservation groups working in the project area were not adequately involved in the EIA process and the proponent denied them a chance to raise their concerns about the proposed development project (Muiruri, 2019; Gakweli, 2019; Gari, 2019a; 2019b). This probably could be one of the reasons that contributed to the failure of the proposed project to obtain approval for EIA Licence from National Environment Management Authority (NEMA).

## VI. CONCLUSION AND RECOMMENDATIONS

### *Conclusion*

This study examined the question of whether the site(s) of the proposed Palm Exotja project had any national heritage resources that would be negatively affected by the project's implementation. The first objective of this study was to review the ESIA study report prepared by Njoroge, Karanja & Gathuma (2019), Kenya's heritage legislation and the existing heritage knowledge of the project area in documentary sources. This study has found that the ultra-modern tourist facility will consist of 61 floors, standing 380 metres above the ground. The proposal is in line with government's national economic development policies as it promises positive impacts such as, promotion of tourism, trade, market for locally produced goods and employment creation among others. Its implementation should be supported. The ESIA study anticipates negative impacts to the environment with mitigation measures in ESMMP. However, national heritage resource is not adequately assessed as one of the baseline factors of the natural environment. The proposed ESMMP does not provide mitigation measures as required in heritage legislation, the Constitution of Kenya (Government of Kenya, 2006; 2010) and the international best practice of funding policies such as those of the World Bank (2012). The second objective of this work was to review the literature on heritage legislation and policies. It has been shown that consideration of national heritage sector concerns in the planning of a development project is provided for in the Constitution of Kenya and the national heritage legislation (*op.cit.*), although it was ignored in the ESIA study for Palm Exotja project under review. The third objective was to review literature on archaeology and heritage resources of the project area (Malindi-Watamu area). The National Museums of Kenya's sites and monuments records and archaeological reports (e.g., Wilson, 1980; 1978; Bitu, 2012), have shown that the proposed project area has known cultural heritage resources. Therefore, we can assume that the proposed construction material source sites at Tezo and Mjanaheri and the proposed location of an off-site kitchen waste disposal site at Chakama may have potential for archaeological and palaeontological



resources. The fourth objective of this work was to conduct fieldwork at the project site at Dabaso near Watamu town, which recorded a probable geological structure in Plot 1 which may contain fossils (Figures 4 and 5); a likely archaeological mound in Plot 2 and faunal shell samples (see Figures 6 and 7). Further the natural and human built environment including the skyline at the project site will permanently change. It has been shown that the existing natural and human built environment is also protected by Constitution of Kenya 2010 (Government of Kenya, 2010). Thus documentation of the natural and human built environment of the project area should be carried out before construction phase, as part of the heritage impact assessment.

#### *Recommendations*

The final objective of the study was to make recommendations regarding the safeguarding of national heritage of the proposed Palm Exotja project area to the project proponent, National Museums of Kenya and professionals of heritage research and management. These recommendations are outlined as follows:

- (1) The proponent of Palm Exotja Highrise project should liaise with National Museums of Kenya and carry out heritage impact assessment at the core project area at Dabaso, at the proposed source sites for construction stones at Tezo, sand quarry sites at Mjanaheri and the off-site kitchen refuse disposal site at Chakama, before implementing the construction phase of the proposed development. This study should be done by a qualified archaeologist, registered as an EIA expert in Kenya or National Museums of Kenya. The outcome of the study will inform the proposed project planning e.g., on where and when to conduct salvage archaeology and/ or watching brief by archaeologist/heritage manager.
- (2) The proponent to ensure National Museums of Kenya undertakes the documentation of the natural and human built environment at the core project site at Dabaso and the related project activity sites at Tezo, Mjanaheri and Chakama.
- (3) The proposed Environmental, Social Management and Monitoring Plan (ESMMP) should be amended to include measures for managing the negative impact to cultural heritage of the project area, including the costs and responsibilities by the project proponent and National Museums of Kenya.
- (4) The local EIA/ESIA experts should take note of the differences between Social Impact Assessments and Heritage Impact Assessments (for culture, objects of cultural value or cultural heritage), for both require different but specialized qualifications and expertise.
- (5) The National Environment Management Authority (NEMA), National Museums of Kenya and the local professional associations of archaeologists, anthropologists and heritage practitioners should collaborate in the development of guidelines

(subsidiary legislation) to regulate the practice of Heritage Impact Assessments in Kenya.

#### ACKNOWLEDGMENTS

The author wishes to thank National Museums of Kenya management for supporting this research work. Mrs. Fatma S. Twahir, Principal Curator of Fort Jesus Mombasa World Heritage Site provided transportation to/from the fieldwork study site. Mr. Caesar Bitu, Head, Coastal Archaeology delegated the fieldwork task to the research team. I thank the Coastal Archaeology personnel: Messrs Mohamed Chiguyaso and Ambrose Kingada who took part in the preliminary heritage data collection at Dabaso, in Watamu. Mr. Saidi Kulembwa (staff driver at Fort Jesus), was in charge of transportation. The employees of the project proponent at Watamu received and permitted the research team to conduct field operations on the two parcels of land. Ms. Rosemary Wanyika Mwandotto, the Librarian at National Museums of Kenya's Coastal Resource Centre, allowed the author to use the library facility during this research. Lastly, I wish to acknowledge the anonymous reviewers and editors of this research article.

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