

Saving the Industry from itself: A case of the Railway industrial heritage in Kenya

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Abstract— Kenya railway represents the earliest direct interaction between Kenya and the industrial revolution of the 18th and 19th century. The railway came to Kenya in 1895 after it had successfully opened up many parts of the world. The industry benefitted through direct imports from key English industrial centres like Liverpool, London, Leeds, Ipswich, Birmingham and Yorkshire. In some instances, supplementary products and services were acquired from India through entrepreneurs like Alibhai Mulla Jeevanjee (1856–1936), a renowned Indian merchant, politician and philanthropist who went on to play a large role in the development of modern day Kenya during colonial rule. Industrialization was also experienced in the country in the form of agricultural mechanization in the White Highlands that were occupied by the European farmers.

The railway has been a key mode of transport for over 100 years. This entrenches the industry as part of Kenya's heritage as it has impacted many aspects of the socio-cultural and economic spheres of life up to date. Many generations have been part of the industry since 1895. Whole communities like the Indian settlers sprung out of the industry with many coming as railway builders or 'coolies' and later founding or joining the business opportunities created along the railway line. More importantly, the railway facilitated Kenya's entry into the global market economy. The railway industry is therefore an integral and important component of the Kenyan national heritage.

Kenya railway heritage include old engines, wagons, the railway/trolley tracks, railway signals, clocks, level crossings, buildings and railway towns. It also includes the SS William Mackinnon steamboat which was operating on Lake Victoria and named after Sir William Mackinnon, founder of the Imperial British East Africa Company. Intangible heritage includes the massive adventure tourism it generated, which popularized the railway or the 'Lunatic Express' and destination 'Kenya'. Its unique and 'pristine' scenic landscapes, the ghosts of 'man-eaters' and its place in oral accounts of many communities add abundantly to this rich intangible heritage. Nairobi city is literally speaking a product of the railway line.

Both tangible and intangible heritage of the railway industry are threatened through blatant negligence, emergent and more profitable modes of transport, including the Standard Railway Gauge (SRG) that is currently under construction, and lack of funds for minimum maintenance of basic infrastructure, like the Railway Museum and its threatened collections. Most of the old Uganda Railway (UR) and Kenya Uganda Railway (KUR) wagons, which are part of this study, are rusty and some of their parts are missing. To a large extent, this heritage is quickly deteriorating and disappearing into the hands of vandals and illegal traders due to the lack of appropriate conservation sensitization and training for the public and heritage professional in

charge of this heritage. Old railway towns are most affected by this threat.

This study identifies the industrial heritage associated with the railway and explores the state of conservation of its collection of artefacts and machines, and the risks associated with the preservation of this industrial heritage.

The study concludes that industrial heritage is not clearly defined and no legal framework specifically targets this heritage for conservation. The study also establishes that the heritage has only been haphazardly conserved, with no clear vision of management, documentation and preservation, as no resources are specifically allocated to a conservation strategy other than the 'minimalist approach' adopted by the Railway Museum. The conclusion highlights that the level of sensitization is low and the public is not informed and/or associated to the conservation needs of this heritage. The study therefore recommends advocacy, sensitization and thorough interventive and preventive conservation practices as the only viable ways of saving the heritage from imminent loss.

Keywords: Industrial heritage, tangible and intangible heritage, conservation, Kenya railway.

I. INTRODUCTION

THE railway line did not only create the connectivity to the hinterland, but also gave historic and heritage value to the route which it passed through and created towns that have grown and prospered along it. However, as train technology continues to change over decades, old railway stations along it may get lost in the transition or even change their characteristics altogether. Most of the railway stations, though, are regarded as living legacies and as forms of objects of cultural, artistic, architectural and social significance. Many of these buildings/stations are in danger of destruction by the new railway line that is underway. This new line, referred to as the Standard Gauge Railway (SGR) is one of Kenya's flagship infrastructure development projects under the Kenya Vision 2030 development blueprint. Construction of the 609km-long line began in October 2013 and is scheduled to be completed by mid 2017. As a country, we should endeavor to conserve this heritage for historic value, tourism and even academic research purposes

The Kenya Railway represents a 'lyric' which is a global commons. This common pool resource is unique and presents a dynamic record of past human activity, reflecting the aspirations, skills and investment of successive generations. The railway is a heritage asset and its sustainability would be a cornerstone for historic continuity. The railway ideally creates a heritage landscape, of outstanding universal value. The protection of this tangible and intangible culture is 'regarded as a shared common good by which every one benefits' [1].

As a common, a railway creates its own narratives and

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significantly transforms a society by exposing it to the rest of the world. It creates new social, economic and political relations as a form of intangible heritage. The emergence of satellite towns in areas like Voi on the edge of Taru desert and Tsavo National Park which would ideally have been unattractive is a case in point. Great seers like Mugo wa Kiburu of the Agikuyu and Syokimau of the Kamba who predicted the coming of the railway are part of this intangible heritage. The railway is a grim reminder of the caravan route, sometimes which involved slaves.

The protection of the railway heritage involves conservation, an inclusive term to cover the breadth of activities aimed at safeguarding cultural heritage for the future through continuity and change [2],[3],[4],[5],[6]. Importantly, cultural heritage is finite and once destroyed cannot be retrieved and therefore:

‘...conservation plays a vital role in ensuring that present and future generations can benefit from the ... heritage both in terms of appreciation and enjoyment for its own sake, and for economic and social advantages that it can bring’ [7]. The urge to conserve ‘derives from several interrelated presumptions: that the past was unlike the present; that relics are necessary to our identity and desirable in themselves; and that tangible remains are finite and a dwindling commodity’ [8].

This paper fills a research gap by investigating an overlooked aspect of heritage in Kenya, that of industrial heritage. It enriches and sharpens the conservation in the Country by sensitizing practitioners on the need to expand the horizon of conservation. Of the numerous documents produced on conservation in Kenya, none was found to involve industrial heritage.

The Kenya railway created urban historic areas that are loci of important cultural property requiring protection and enhancement. Bearing our cultural heritage, these areas provide us with confidence and security to face the future. According to [8], the past is omnipresent and collectively immortal, and the surviving past’s most essential and pervasive benefit is to render the present familiar and comprehensible, thus making surroundings comfortable. This is not simply prettifying urban spaces but making time-spaces into works of art [9]. These historic areas and their related heritage are not just aesthetic objects but irreplaceable works.

The ability to recall and identify with our own past gives existential meaning, purpose and value because what succeeds has been shaped by precedents [10],[8]. The lessons from the past can enable us to foretell, if not forestall the future. This is well captured by [8] in the following words:

‘...The usefulness of history...is a truth too generally receiv’d to stand in need of proof...The theatre of the world supplies only a limited number of scenes, which follow one another in perpetual succession. In seeing the same mistakes to be regularly follow’d by the same misfortunes, ‘tis reasonable to imagine, that if the former had been known, the latter would have been avoided’ (p.47).

Conservation of heritage has instructive parallels that can be used as a guide to current developments by drawing from lessons learned from the past. This will preserve traditional skills and craftsmanship, create new employment

opportunities for artists, craftsmen, engineers, technologists, etc, and encourage business promotion through specialised construction activities amongst the contractors, developers, material suppliers and traders. According to [3], conservation may be defined as ‘the action taken to prevent decay’ (p. 3). It embraces all acts that prolong the life of our cultural and natural heritage in order to ensure continuous transmission of artistic and human messages. [3] further indicates that the basis of all conservation practice is rooted in legislation. [4] and [11] takes conservation to be the most generally acceptable and inclusive term to cover the breadth of activities aimed at safeguarding heritage for the future through *wise use* and deliberate *intervention* in order to control the rate of change.

Conservation related actions have had a long history, the earliest being spurred almost entirely by concern for the past and its people. [12] as cited by [13] records that ‘the Greeks preserved the Hellenic monuments with honour, Roman emperors such as Hadrian also respected these *exemplaria Graeca*, and even their successors, Teutonic chieftains such as Theodoric of Rome, acted to preserve the monuments of that ancient city [13]. It was not until mid to late eighteenth century that attitudes of the social elite towards the monuments and inheritance of the past began to change significantly.

[14] emphasizes that conservation is practised in order to cope with our ‘own inability to invent the present’. This may be explained through the waning confidence in the ‘present’ and therefore an urge to revive the past. Less pessimistically, [15] citing Hockney has said that conservation is done for love, although he offers no explanation what that love is for [14]

II. RATIONALE FOR CONSERVATION OF INDUSTRIAL HERITAGE

In his *Contemporary Theory of Conservation*, [14] does not relate conservation to truth but to meanings. These meanings from a theoretical point of view give the rationale for conservation:

- To preserve or improve the scientific meanings of an object
- To preserve or improve the social, hi-cult symbolic meanings that an object has for large groups
- To preserve or improve the sentimental symbolic meanings that an object has for small groups or even individuals (p. 175)

These reasons are not mutually exclusive. Classical theories of conservation, generally taken as the approaches to conservation, and based on the notion of pursuit of truth, cannot cope with these communicative phenomena, which are outside their conceptual frames. For as [16] has argued, ‘it is the act of conservation itself, that makes an object part of cultural heritage, not the cultural heritage that demands conservation’ [14]. The railway has had a profound effect on the birth and development of the country. The identification, documentation, analysis and conservation of it would create a heritage that is recognized and understood as a national heritage.

The legion of benefits the past provides clearly transcends nostalgia. Freud cited in [17] has clearly stated that ‘only a

good-for-nothing is not interested in the past' [8]. Conservation is important because of the charm of the past [18].(Wilde, 1981). The concept of national heritage is equally affable, and is occasionally evoked for the purposes of justifying conservation so that the connection with a treasured past is maintained [5], [11].

The surviving past's most essential and pervasive benefit is to render the present familiar since its traces on the ground and in our minds enable us make sense of the present. [7] celebrates that 'a desire to promote national identity or to explicitly stimulate domestic and international tourism is another reason'.

[19] has identified associational and psychological needs that derive from the concept of symbolism as further reasons for conservation. He further identifies history, artistic design, and associations as the other grounds for conservation. The conservation of historic heritage is integral to our sense of identity. Ability to recall and identify with our past gives existence meaning, purpose and value [20]. Furthermore, conservation practices can be undertaken for pedagogical reasons. We can learn from the past and this might 'enable men to foretell, if not to forestall, the future' [8]. The conservation of cultural heritage is not solely undertaken for aesthetic and contemplation reasons. These treasures from the past also enrich our present.

Conservation is not without contradictions and opponents. [19] has shown that the varied interpretation of the word conservation causes antagonisms from the many shades of opinions. Due to its close resemblance to conservative, it becomes even more provocative. Conservation is seen as inhibiting progress and change, both materially and imaginatively.

[8] avers that a past too much esteemed saps present purposes. This means that an over-indulgence in memory likewise shuts out present experience. Reverence for the past is therefore commonly seen to inhibit change, embargo progress, dampen optimism, and stifle creativity. As such, equating conservation with conservatism make the present a mere spectator of the past, weakening individuality, an indictment well expressed by [21] in his *Use and Abuse of History*:

'...over-attention to the past turns men into dilettante spectators, their creative instinct destroyed, their individuality weakened, seeing themselves as mere late comers born old and grey...' [8].

Ideally conservation and development should be considered as bedfellows. The moral is to protect as we develop so that our past and future complement in line with the prevalent universal values.

III. INTEGRITY AND AUTHENTICITY

The philosophy in conservation advocates a values-based approach based on integrity and authenticity [7], [22], [23]. Integrity is related to wholeness and the test of authenticity is in genuineness. Authenticity is a requisite qualifying factor and a fundamental part of the modern conservation of cultural heritage, which can be complemented with the notion of integrity.

Conservation must be undertaken with *integrity*, using materials appropriate for the purposes, in a fitting manner [7]. Industrial products are part of a socio-cultural heritage which holds details and information about the past and 'this is its historic integrity' [7]. The application of restoration or reconstruction to show how it looked like in the past defies integrity. This approach lacks moral soundness or unity. Integrity includes the following: physical integrity; structural integrity; design integrity; aesthetic integrity; integrity of the building within its setting and context and professional integrity of the team [24], [7]; [2] [24] argues that:

'...the condition of integrity in relation to cultural sites should be understood in the relevant historic context describing the state that a particular place has acquired by the present time. Integrity can be referred to visual, structural and functional aspects of a place. It is particularly relevant in relation to cultural landscapes and historic areas, but even a ruin can have its historic integrity in its present state and its setting' (p. 8)

Authenticity implies genuineness, undisputed credibility and truthfulness. Conservation in many instances depends on interpretations of which there may be several, in which case there is not one truth [7], [23]. Authenticity in conservation relates to: design or form; materials; techniques; traditions and processes; place, context and setting; function and use [7]. [24] indicates that the Nara Conference of 1994 noted that while the word 'authentic' was not necessarily used in all languages, it was possible to find corresponding words to express the intent. The *Nara Document on Authenticity* has emphasised that 'the diversity of cultures and heritage in our world is an irreplaceable source of spiritual and intellectual richness for all humankind' [25].

IV. VALUES-LED APPROACH TO CONSERVATION

In a value-based approach to conservation, a wider range of values are recognized, not all of which relate to the built environment, which has been emphasized in the past. 'Values are qualities and characteristics that different users and different societies place on the cultural heritage at different times' [7]. The values-based approach is therefore an analytical method in which value judgments have to be as objective as possible. Values will not have the same weighting, and some may be in opposition to each other, and a balanced decision making is called for [2], [23].

The conservation of cultural property demands the management of resources and a good sense of proportion. Objects chosen for treatment and the degree of intervention are predicated upon the values that can be assigned to cultural property. The values provide a framework for systematically setting the overall priorities in the scheduling of interventions. These values can be grouped into three headings namely:

'*Cultural Values*: documentary value, historic value, archaeological and age value, aesthetic value, architectural value, townscape value, landscape and ecological value; *Use Values*: functional value, economic value, social value and political value

Emotional Values: wonder, identity and continuity' [4].

The values identified above are by no means exhaustive. Other values identified are 'intended as an overview and starting point when embarking on a conservation project' [7]. Some of these values that are of greater concern in this paper are mentioned below. Age and rarity value concerns the fact that the older a cultural object is, the more value is likely to be attached to it. Rarity also relates to the occurrence of an industrial type or technique. Industrial heritage generally have exemplary qualities of design and high quality of craftsmanship and therefore have an artistic value.

The associative value is the association a place has with an event or personality in history [3]. Places of war, e.g. battlefields have a high associative value, even if there is no structure on site. They also possess emotional and spiritual values. Thanatourism and dark tourism are forms of attractions that are drawn from the relics of our sad past like war and genocide. The reality of such events may be used to avoid similar dark experiences as part of our focus. Rwanda's genocide sites serve this purpose [26].

We can learn a lot from industrial historic areas, including their history, social relations and construction techniques and thus educational value is inculcated in us. Other values identified by [7] are: emotional values, historic values, landscape value, local distinctiveness, political value, public value, religious and spiritual value, scientific research and knowledge value, social value, symbolic value, economic, technical value and townscape value [7]. [3] and [4] recommends that the cost of conservation be allocated partially to each of the values in order to justify the total costs to a community.

V. PRINCIPLES OF CONSERVATION

[27] has identified several philosophical principles to follow when devising conservation operations. He identifies *minimum intervention* and *reversibility* as the key words. [3] has also enumerated a standard which must be vigorously observed in conservation work. The standard can be appropriated to industrial heritage, even the one of a moveable nature. The standard is summarised as below:

1. The condition of the object must be recorded before any intervention
2. Historic evidence must not be destroyed, falsified or removed
3. Any intervention must be to the minimum necessary
4. Any intervention must be governed by unswerving respect for the aesthetic, historical and physical integrity of cultural property
5. All methods and materials used during treatment must be fully documented (p. 6).

Further, [3] suggests that any proposed intervention should:

1. be reversible or repeatable, if technically possible, or
2. at least not prejudice future intervention whenever this may become necessary;
3. not hinder the possibility of later access to all evidence incorporated in the object;
4. allow maximum amount of existing material to be retained;

5. be harmonious in colour, tone, texture, form and scale, if additions are necessary, but should be less noticeable than the original material, while at the same time being identifiable;
6. not to be undertaken by conservators/ restorers who are insufficiently trained or experienced, unless they obtain competent advice. However, it must be recognized that some problems are unique and have to be solved from first principles by trial and error basis.

VI. THE NIZHNY TAGIL CHARTER FOR THE INDUSTRIAL HERITAGE: THE INTERNATIONAL COMMITTEE FOR THE CONSERVATION OF THE INDUSTRIAL HERITAGE (TICCIH)

TICCIH is the world organisation representing industrial heritage and is special adviser to the International Council on Monuments and Sites (ICOMOS) on industrial heritage. The text of this charter was passed by the assembled delegates at the triennial National Assembly of TICCIH held in Moscow on 17 July, 2003.

The charter defines *Industrial heritage* as consisting of the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education.

It further identifies *Industrial archaeology* as an interdisciplinary method of studying all the evidence, material and immaterial, of documents, artefacts, stratigraphy and structures, human settlements and natural and urban landscapes, created for or by industrial processes. It makes use of those methods of investigation that are most suitable to increase understanding of the industrial past and present.

The historical period of principal interest extends forward from the beginning of the Industrial Revolution in the second half of the eighteenth century up to and including the present day, while also examining its earlier pre-industrial and proto-industrial roots. In addition, it draws on the study of work and working techniques encompassed by the history of technology

Industrial heritage has certain values:

- The industrial heritage is the evidence of activities which had and continue to have profound historical consequences. The motives for protecting the industrial heritage are based on the universal value of this evidence, rather than on the singularity of unique sites.
- The industrial heritage is of social value as part of the record of the lives of ordinary men and women, and as such it provides an important sense of identity. It is of technological and scientific value in the history of manufacturing, engineering, construction, and it may have considerable aesthetic value for the quality of its architecture, design or planning.
- These values are intrinsic to the site itself, its fabric, components, machinery and setting, in the

industrial landscape, in written documentation, and also in the intangible records of industry contained in human memories and customs.

- Rarity, in terms of the survival of particular processes, site typologies or landscapes, adds particular value and should be carefully assessed. Early or pioneering examples are of especial value. [28].

VII. THE KENYAN RAILWAY HERITAGE: CONSERVATION PATHS

The industrial revolution emerged on the British Islands in the middle of the 18th century and in the beginning of the 19th century on continental countries. The resulting technological and social changes impacted thoroughly on Kenya. Indeed it is these changes that have helped create an enduring industrial heritage in Kenya.

The conservation of railway heritage as a unique and authentic feature plays a role in the regional identity of industrial cultural landscapes. The so-called traffic carriage heritage represents a unique segment within industrial heritage because the building of railway network has helped the development of industrial output. Railways in the first half of the 19th Century made the industrial revolution possible, creating the conditions for Nairobi to grow, allowing remote areas to become vital ports and industrial centres, and employing multitudes of people in reliable employment. 150 years later, there has been significant change, in particular the electronic revolution and some of the important and iconic items of the Kenyan railway have been allowed to disappear.

Worldwide, the use of this important quantity of industrial heritage is beginning to gather strength, realizing its hidden potential not in tourism only, but in making the best of the local residents' and economy's other service segments. Industrial areas frame historical town centres most of the times, but they can also be found isolated in areas of smaller settlements. However, industrial areas suffer from a structural crisis after a two hundred years blooming period, and as a consequence, the integrity and identity of these industrial sites have also gone through a significant negative change. As a paradox, it is the reason why the conservation of the Kenyan railway heritage's values, used by local residents, has acquired significance and has become an organic part of their lives.

Railway heritage presents a number of challenges related to the requirements for conserving the large industrial structures and technical objects that form such an important part of our modern heritage. The preservation of industrial sites, oversized objects, machinery, and working technology in the context of their significance and interpretation requires cross disciplinary expertise ranging from engineers, conservation professionals, curators, and those working in or passionate about this heritage to develop a consistent approach of conservation.

This railway heritage can be considered as a socio-cultural heritage and an industrial heritage. A large part of this heritage is made of functional objects. From a conservation perspective it is required to preserve both the form and the function of these objects that may work through mechanical, electrical, hydraulic, or pneumatic means. Their function is an integral part of their identity and value. It is therefore critical to

develop an understanding of decision-making processes for conserving this heritage, balancing wear and tear from use, and identifying the cause of their deterioration in order to conserve both functional objects, and those that have lost the ability to function.

Listed buildings and machines should ideally remain in their original location and this particularly applies, where the railway environment is an intrinsic aspect of the listing. However, there is pressure to relocate redundant listed objects particularly when their volumes require large and safe open-space or storage. While relocation affects the building's and artefacts' conservation integrity, presentation of relocated artefacts in a heritage railway environment provides for interpretation of railway history. However, contradictory requirements and pressures affect the conservation process and there is a need to redefine accepted conservation theory to cope with the realities of railway heritage preservation. This requires engagement by all interested parties and a systematic identification of all artefacts and heritage to be conserved.

VIII. LEGAL FRAMEWORK FOR INDUSTRIAL CONSERVATION IN KENYA

The conservation of heritage in Kenya is governed by the National Museums and Heritage Act of 2006. This is the successor of the Antiquities and Monuments Act, and the National Museums Act, both of 1984. The Antiquities and Monuments Act was enacted to provide for the preservation of antiquities and monuments in Kenya. The Act provided for comprehensive machinery for the control of antiquities and monuments that existed under the Preservation of Objects of Archaeological and Palaeontological Interest Act, which was first enacted in 1943 and revised in 1962. The National Museums Act provided for the 'establishment, control, management and development of the National museums and any other connected purposes' [29].

The National Museums and Heritage Act of 2006 is the most current of a series of documents that govern conservation. This is an:

'Act of Parliament to consolidate the law relating to national museums and heritage; to provide for the establishment, control, management and development of national museums and the identification, protection, conservation and transmission of the cultural and natural heritage of Kenya; to repeal the Antiquities and Monuments Act and the National Museums Act; and for connected purposes' [30].

In this Act, unless the context otherwise requires- '*antiquity*' means 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.

The Act further defines '*cultural heritage*' to mean, *inter alia*, as monuments; (b) architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of universal value from the point of view of history, art or science; (c) groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape,

are of outstanding value from the point of view of history, art or science; (d) works of humanity or the combined works of nature and humanity, and areas including archaeological sites which are of outstanding value from the historical, aesthetic, ethnological or anthropological point of view; and includes objects of archaeological or palaeontological interest, objects of historical interest and protected objects [30].

Industrial heritage would qualify as cultural heritage, since the objects are of *historical interest*. The Act defines 'object of historical, cultural or scientific interest' to mean an object which came into existence in or after the year 1800.

The National Museums and Heritage Act of 2006 provides for the establishment, functions and the powers of the National Museums of Kenya, a body corporate. Specifically, the National Museums shall:

1. Serve as national repositories for things of scientific, cultural, technological and human interest;
2. Serve as places where research and dissemination of knowledge in all fields of scientific, cultural, technological and human interest may be undertaken;
3. Identify, protect, conserve and transmit the cultural and natural heritage of Kenya; and,
4. Promote cultural resources in the context of social and economical development. [30].

It is clear that the National Museums of Kenya is the legally mandated body to undertake conservation. However, emphasis has been on architectural heritage at the expense of other heritages.

The little effort at conserving the industrial heritage of the railway has been undertaken by the Kenya Railways themselves.

The practical defect of the conservation law is that emphasis has been on the conservation of the built heritage at the expense of industrial heritage and other heritages. Indeed, there is no training at all in the conservation of industrial heritage in Kenya, especially as appertains to the engineering profession.

IX. HISTORICAL BACKGROUND OF KENYA RAILWAY

Kenya Railways represents the historical growth of this country and Nairobi Railway Museum narrates the tale of this country's evolution; indeed it is the rail that developed Kenya to the country it is now! As is commonly known, '*...it is not uncommon for a country to create a railway, but is uncommon for a railway to create a country.*' These were the words uttered by a senior British administrator, Sir Charles Elliot in 1903 [31].

The movement of the administrative structures from Machakos to Nairobi and the cropping up of the various racially segregated settlements were due to the railway. As shown by [32] the railway had the following impacts:

- orientation of the settlements as shared by the races of Kenya at the time
- location of administrative structures that were central to the government of Kenya
- European business activities and colonization of the rest of East Africa was facilitated by the railway line.

The Railway Museum is situated at the north-west end of

Nairobi station and can be seen from the Uhuru Highway where it crosses the main line. The museum was established to preserve and display this heritage and records of the railways of East Africa from their inception to the present day. In addition to the collection of steam locomotives and rolling stock, there is a large display of smaller exhibits and models.

The Museum is still rail-connected, allowing restored locomotives access to the main line for working steam excursions. With the privatisation of Kenya Railways, the Museum and exhibits have been transferred to the guardianship of the National Museum of Kenya. The curator of the museum is keen on the promotion of heritage tourism and advancement of railway conservation [33].

X. CONDITION SURVEY

The Railway Museum is quite charming and condenses the history of the country in a tiny space. [34] note that the Railway Museum building was opened in 1974 by the then East African Railways Corporation, the successor of original Uganda Railways and now managed by Kenya Railways.

Among the numerous collections are collections of maps and photographs, models, and silverware artefacts. There is an extensive outdoor collection which includes ancient locomotives, cranes, the coach in which Charles Ryall, was dragged from by a man eating lion in June 1900 and wagons.

The authors carried out an exploratory survey of the conditions of the railway heritage which forms the exhibition at the Railway museum through direct observation and photographic documentation.

Photographs were extensively used to record the built environment characteristics that needed quick documentation. The condition of the exhibits may be summarized as follows:

- The building where the internal exhibits are housed is in good condition but some windows cannot be fully closed, letting in rain. This results in the deterioration of organic artifacts such as books and other paper materials which are now destroyed. Given that the Railway Museum houses some of the oldest collections in the history of East Africa, proper conservation of the records is necessary.
- The collection of photographs showing the construction of the industrial heritage is poorly managed and preserved. Some of the albums are mouldy and flaky due to age and damp conditions of storage and exhibition.
- An attempt has been made to shelter some of the outdoor exhibits. While this is commendable, it is inadequate since not all are fully sheltered from the elements. The train engines are very rusty. There is evidence of vegetation growing on some of the artifacts.
- The Museum writes unofficial messages, i.e. graffiti, on some of the artefacts on exhibition outdoor in order to keep vandals who deal with scrap metal deals, at bay. This changes the artefacts' authenticity and integrity.
- Artefacts are exhibited both inside and outside the museum building.
- The artefacts are not inventoried or documented.

- There was no conservator to take care of the artefacts.
- Security is provided by means of a private company.

The following figures show the deplorable state of some of the exhibits as described above. It is however noted that some of the exhibits are well preserved, especially the indoor ones.



Figure 1 Haphazard arrangement of indoor exhibits. Note the dusty floor and walls



Figure 2 Rusty Exhibit

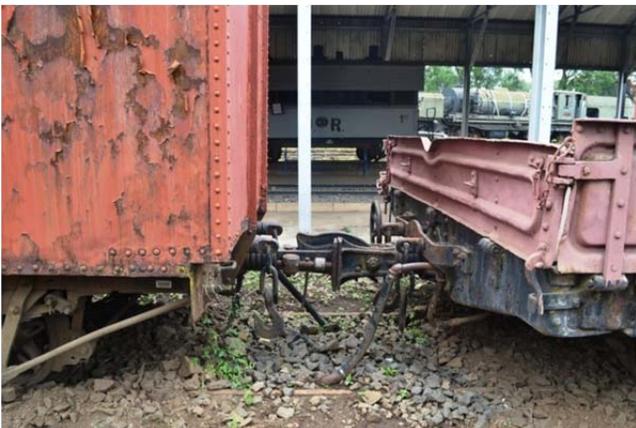


Figure 3 Peeling paint and broken hoses on carriages.



Figure 4 Open carriage wagon filled with water. The carriage came from Madras and Southern Mahratta Railway.



Figure 5 Vegetation growing on one of the locomotive engines



Figure 6 Crane under threat from scrap metal dealer. The curator boldly reserved it for the museum by writing on it.



Figure 7 The first restaurant car made of the Railway, made to very high standards with hardwood interiors and leather. This disintegrated and vandalized car dates back to 1928.

XI. CONCLUSION

Clearly, the railway museum is a rich repository of the embryonic beginnings of Kenya as country. It presents the country's evolutionary path through time. A lot of the outdoor exhibits are in a sorry state. This deplorable condition is made worse by the fact that there is no register of items to be conserved. This complicates the conceptualization of tourism within the establishment and authenticity is threatened.

There is need to identify, document and protect the industrial heritage of the Kenya Railways, A full record of the physical features and site conditions should be made by trained conservators. Significant buildings, structures and heritages would be lost if no documentation appreciation of their value is attempted. Indeed they constitute the general heritage of the Kenya Railways.

The creation of a museum of Technology or museum of industrial heritage is urgent. The present site can be escalated and redeveloped into such a project according to professional standards. The accumulations of time need protection for posterity. In them, they convey the intrinsic values. This would help the country in salvaging heritage that is currently housed outside Nairobi Railway Museum. There are exhibits located in smaller towns where conservation is not guaranteed. There is also clear evidence that some of the heritage has been lost over the years due to neglect.

There should also be courses to train conservators in the field of industrial heritage, and possibly industrial archaeology by local universities, as part of the Engineering programmes. A glimpse at the syllabus for the undergraduate students in Mechanical Engineering, of the Jomo Kenyatta University of agriculture and Technology indicates that the students are taken through a course called History of Technology, but this course does not cover and confer the skills necessary for preservation of industrial heritage. This course could be done in collaboration with the National Museums of Kenya. Indeed, the general negligence of industrial heritage and its definition means that it is excluded from mainstream academic training in Kenyan institutions of higher learning.

The National Museums and Heritage Act should be reworked to explicitly cover the protection and listing of industrial heritage. At the moment, the National Museums of Kenya is

handicapped in this area. Kenya also needs to ratify international charters and other instruments that deal with the conservation of industrial heritage as a matter of urgency.

This paper has highlighted the value of the railway heritage, a subset of industrial heritage. Further studies are necessary on other aspects such as maritime heritage, motor vehicles, power plants, water wheels, smitheries, telecommunications, construction technology and agricultural machines, heavy electrics among the very rich industrial accumulated in Kenya since the 1895. The study has established the existence of both tangible and intangible industrial heritage as part of Kenya, that the heritage is in a fairly good condition though proper preservation is not maintained, records of this heritage are threatened by the vagrancies of nature, the heritage is rather diverse and important for future generations, in the face of the SGR this heritage is likely to be forgotten if appropriate steps are not taken urgently, the railway is Kenya and vice versa.

XII. APPENDIX

The authors would like to thank the Curator, Railway Museum for allowing access to the exhibits.

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