

# *Sustainability of Darjeeling Himalayan Railway: Learnings from Delisted World Heritage Sites*

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**Abstract**— This paper highlights the issues of sustainability of Darjeeling Himalayan Railway which is a UNESCO World Heritage Site with reference to three delisted World Heritage Sites till date i.e., Arabian Oryx Sanctuary, Dresden Elbe Valley and Liverpool – Maritime Mercantile City. UNESCO before delisting any sites always provides some suggestions and recommendation for the conservation of the sites to the state party but if state party did not fulfil this suggestion and if the Outstanding Universal Value of the site get lost then it is finally delisted. The three delisted sites preferred development rather than to sustain the Heritage Sites. Arabian Oryx Sanctuary reduced the sanctuary by 90% for the petroleum extraction, people of Dresden valley wanted to get rid of huge traffic and as so referendum was conducted and 67.92% people of Dresden voted in favor of the construction of bridge Waldschlosschenbrücke, which threatening the Outstanding Universal Value and irreversible action on the environment and finally Liverpool – Maritime Mercantile wanted new development in the waterfront rather than sustaining the old architect and heritage buildings.

**Keywords**— UNESCO, World Heritage Site, Delisting, Darjeeling Himalayan Railway

## I. INTRODUCTION

Darjeeling, popularly known as 'Queen of Hills'. It is wellknown for its three Ts i.e., Tea, Timber and Tourism, but there is another T which is consider as the 4<sup>th</sup> T of Darjeeling (Toy train) world widely known as Darjeeling Himalayan Railway.

The Tiny, (The Eastern Indian Railway workshop situated at Jamalpore (Jamalpur) was assigned to construct the first engine of the DHR & due to its size instantly christened as 'Tiny') of the first engine of the DHR, connected the sweaty plains with the cool and serene Hills for the first time in 1880. On March 4 of that year, the then Viceroy of India, Robert I, Earl of Lytton inaugurated the line from Siliguri to Kurseong as steam tramway. From August 1880, the tramway was opened for the public use. It was only on July4, 1881, the line was completed up to Darjeeling and the name was changed from Darjeeling Steam Tramway Company to Darjeeling Himalayan Railway Company on 15th of September (Rai, 2011).

### A. World Heritage Status of Darjeeling Himalayan Railway

Indian Railways in recognition of its social, cultural, economic and industrial value as a lifeline of India, made an application to UNESCO for World Heritage Inscription of Darjeeling Himalayan Railway (DHR) in 1998. The world heritage committee of UNESCO at its 23th session held at Marrakesh, Morocco decided to inscribe Darjeeling Himalaya Railway site on the world Heritage list.

UNESCO's World Heritage Committee inscribed DHR as a World Heritage Site on 5th December 1999 stating the following reasons:

An outstanding example of the influence of an innovative transportation system on social & economic development of a multi-cultural region, which was to serve as a model for similar developments in many parts of the world (Criterion (ii))

The development of railways in the 19th century had a profound influence on social and economic developments in many parts of the world. This process is illustrated in an exceptional and seminal fashion by the DHR (Criterion (iv))

“The DHR is the first, and still the most outstanding, example of a hill passenger railway. It applied bold and ingenious engineering solutions to the problem of establishing an effective rail link across a mountainous terrain of great beauty. It is still fully operational and retains most of its original features intact.



Picture(1): (Note: Picture of Ghoom Railway Station which is a highest situated Railway Station in India, tourist and locals roaming around the Toy Train).

The proposal for DHR as a World Heritage site was submitted by the National Rail Museum on 29 June1998 to the UNESCO. Man, inquiry and evaluations were made for the heritage criteria and the DHR was Sanctioned the status of the World Heritage (DHR / Indian Railways Portal, WHC Nomination Documentation).

**B. UNESCO World Heritage Status as a marketing tool**

WHS designation can act as a basis of advertising tool for the site. A UNESCO World Heritage designation is a very recognizable title and can be used to promote visitation to the area on a regional, national and international scale. UNESCO World Heritage Site designation/tag generates public awareness and increase the number of visitors to the site which leads to increase in visitors spending and helped in boosting the local tourism industry with increasing employment and wealth to the site (Caust and Vecco, 2017; VanBlarcom and Kayahan, 2011).

VanBlarcom and Kayahan (2011) categories four factors based on their motivation for becoming a World Heritage Status as follows:

(1) A celebration designation: Treat World Heritage Status as a celebration or reward designation for heritage already preserved; do not use World Heritage Status to achieve socio-economic impacts, since it sees the achievement itself as the reward.

(2) A heritage .saves our soul (SOS) designation: Treat World Heritage Status as an emergency attention designation for unique heritage at risk; its main efforts are concentrated on preserving the heritage.

(3) A marketing/qualify logo/brand: Treat WH inscription as a marketing tool and quality brand to promote the development of tourism.

(4) A place-making catalyst: Treat WH inscription as a powerful catalyst for economic development using heritage as a tool to develop powerful identities for places and to initiate actions for making fundamental changes to places; use inscription to generate wider socio-economic impacts.

**C. Research Questions**

1) Does DHR still has important significance on Darjeeling tourism?

2) To highlight how and why the three heritage sites (Arabian Oryx Sanctuary, Dresden Elbe Valley and Liverpool – Maritime Mercantile City) got delisted from the UNESCO WORLD Heritage Sites.

**D. Methodology of the study**

The methodology used for the purpose of this study is descriptive research. Informal interviews, personal visit and in-depth interview with experts (Officers and staffs of Darjeeling tourism Department, officers of Elysia Building, DHR) was conducted so as to explore the overarching characteristics of current tourism in Darjeeling. Secondary data such as, data on tourist inflow in Darjeeling was collected from Darjeeling Tourism Department and data of DHR passenger inflow was collected from Elysia Building Kurseong, with these percentages of overall tourist having ride in DHR has been calculated to evaluate the significance of DHR in Darjeeling tourism. Furthermore, a primary survey was conducted to analyse a tourist response regarding the significance of DHR in Darjeeling tourism, response was asked to express their view in a five-point Likert scale ranging from strongly agree to

strongly disagree, the survey was conducted in various tourist spots of Darjeeling Hills like Chowrasta, Ghoom Railway Station, Batisya loop, Tiger Hill, Padmaja Naidu Himalayan Zoological Park etc. Purposive random sampling method has been used for the collection of data; 100 samples was collected in the month of March 2022 - April 2022.

**II. FINDINGS**

**A. Listing of a site into UNESCO World Heritage Sites (WHS)**

The World Heritage Committee (WHC) provides that it is for the Committee to ‘establish, keep up to date and publish the World Heritage List. It is the Committee that must agree to inscribe a site, pursuant to an objective scientific procedure. Nominated sites are first assessed by the international organisations that have been retained to assist in the operation of the WHC. This function is performed by IUCN for natural heritage nominees and ICOMOS for cultural heritage. Following their assessment, reports are prepared for the Committee incorporating a recommendation to inscribe, reject or refer/defer a nomination pending further work by the electing state. The Committee then decides, by a two-thirds majority of the members present and voting, whether the property should be inscribed on the list, rejected or referred/deferred back to the nominating state. Only if the site is accepted for inscription can a state call that property a World Heritage Site (Goodwin, 2010).

Table(1): Criteria for the inscription of the Dresden and Liverpool World Heritage Sites and their respective perceptions by the State Parties, the World Heritage Committee and the Advisory Body (Gaillard and Rodwell, 2015).

	Dresden Elbe Valley	Liverpool – Maritime Mercantile City
Texts of the justification for Outstanding Universal Value as inscribed at the 28th session of the World Heritage Committee, Suzhou, China, 2004, based on the cultural criteria set out in the Operational Guidelines	“Criterion (ii): The Dresden Elbe Valley has been the crossroads in Europe, in culture, science and technology. Its art collections, architecture, gardens, and landscape features have been an important reference for Central European developments in the eighteenth and nineteenth centuries. Criterion (iii): The Dresden Elbe Valley contains exceptional testimonies of	“Criterion (ii): Liverpool was a major centre generating innovative technologies and methods in dock construction and port management in the 18th and 19th centuries. It thus contributed to the building up of the international mercantile systems throughout the British Commonwealth. Criterion (iii): The city and the port of Liverpool are an exceptional testimony to the development of

<p>court architecture and festivities, as well as renowned examples of middle-class architecture and industrial heritage representing European urban “Criterion (ii): Liverpool was a major centre generating innovative technologies and methods in dock construction and port management in the 18th and 19th centuries. It thus contributed to the building up of the international mercantile systems throughout the British Commonwealth. Criterion (iii): The city and the port of Liverpool are an exceptional testimony to the development of maritime mercantile culture in the 18th and 19th centuries, contributing to the building up of 10 development into the modern industrial era. Criterion (iv): The Dresden Elbe Valley is an outstanding cultural landscape, an ensemble that integrates the celebrated baroque setting and suburban garden city into an artistic whole within the river valley. Criterion (v): The Dresden Elbe Valley is an outstanding example of land use, representing an exceptional development of a</p>	<p>maritime mercantile culture in the 18th and 19th centuries, contributing to the building up the British Empire. It was a centre for the slave trade, until its abolition in 1807, and for emigration from northern Europe to America. Criterion (iv): Liverpool is an outstanding example of a world mercantile port city, which represents the early development of global trading and cultural connections throughout the British Empire.”</p>		<p>major Central European city. The value of this cultural landscape has long been recognized, but it is now under new pressures for change.”</p>	
		<p>Perceptions of the site by the State Party in the nomination dossier</p>	<p>Harmonious connection between landscape and architecture, fields integrated into a city.</p>	<p>Global maritime mercantile importance; surviving extent of complementary components of the architectural and industrial heritage; coherent urban landscape</p>
		<p>Perceptions of the site by the World Heritage Committee and the Advisory Body (ICOMOS)</p>	<p>Representative of the drama and reconstruction of an entire town and people. Good example of a continuing cultural landscape with a long and complex history. Importance of the valley’s cultural and natural aspects.</p>	<p>World port city; pioneering developments in dock technology and related systems; range and quantity of significant buildings.</p>
		<p>Statements of authenticity and integrity. (In the nomination dossiers)</p>	<p>Continuity of the site, preservation of the artistic connection of the construction development related to the river, meadows as a green and recreational area.</p>	<p>Urban landscape as testimony to the historical role and importance of the city and manifestation of the site’s tangible authenticity.</p>
		<p>Statements of authenticity and integrity (In the ICOMOS evaluation)</p>	<p>Despite grave losses in the historic city centre during the Second World War, the site has retained its overall historical authenticity and integrity in its distinctive character and components.</p>	<p>Focused on the state of conservation of the historic docks and buildings, including their architectural features and minor detailing.</p>

Table (2): Criteria for the inscription of the Darjeeling Himalayan Railway (DHR) and its respective perception by the state parties, World Heritage Committee and the advisory body.

	Darjeeling Himalayan Railway (DHR)
Texts of the justification for outstanding value as Inscribed at the 23rd session of World Heritage Committee, Marrakesh, Morocco.	Criterion(ii):The Darjeeling Himalayan Railway is an outstanding example of the influence of an innovative transportation system on the social and economic development of a multi-cultural region, which was to serve as a model for similar developments in many parts of the world. Criterion(iv):The development of railways in the 19th century has a profound influence on social and economic developments in many parts of the world. This process is illustrated in an exceptional and seminal fashion by the Darjeeling Himalayan Railway.
Perception of the site by the state party in the nomination dossier and perception of the site by the World Heritage Committee and the advisory body (ICOMOS)	a) the creation of a heritage conservation unit; b) the establishment of a buffer zone along the length of the railway line and the station and c)the establishment of an adapted management plan.
The observer of Germany along with ICOMOS and observer of India Underlined:	The importance of retaining the steam trains within the site., despite the movable character of the steam trains, they would most certainly remain in use due to their importance as a tourism attraction.

**B. Delisting of Heritage Sites**

Deletion is a very rare event, however there are three sites which has been detected from the World Heritage Site.

Guidelines by the World Heritage Committee/the site can be delisted in following case:

a) where the property has deteriorated to the extent that it has lost those characteristics which determined its inclusion in the World Heritage List; and

b) where the intrinsic qualities of a World Heritage site were already threatened at the time of its nomination by action of man and where necessary corrective measures as outlined by the State Party at the time, have not been taken within the time proposed (Goodwin, 2010).

1.The first was the Arabian Oryx Sanctuary, located in Oman, in 2007. In this instance, noting with the alarm by UNESCO and its intensive efforts however, the Sanctuary’s area was reduced by 90 per cent to allow for petroleum extraction, thereby threatening its integrity (Gaillard and Rodwell, 2015). Further, the population of the Arabian Oryx was in serious decline due to the decreased range, low number of breeding females, un-checked poaching and competition with domestic livestock for grazing. Also noting that most recommendations from the 2000 monitoring mission as well as from previous Committee decisions, was not implemented. Thus, the State Party failed to fulfil its obligations defined in the Convention, in particular the obligation to protect and conserve the World Heritage property of the Arabian Oryx Sanctuary (Sanstos and Zobler, 2012),

Some highlights of DECISIONS ADOPTED AT THE 31st SESSION OF THE WORLD HERITAGE COMMITTEE (CHRISTCHURCH,2007) are

\* UNESCO regrets that the State Party has proceeded to significantly reduce the size of the Arabian Oryx Sanctuary, which was in violation of the Operational Guidelines of UNESCO. Thus, destroying the property’s Outstanding Universal Value and integrity of the Arabian Oryx Sanctuary.

\* World Heritage Committee failed to protect the property i.e., Arabian Oryx Sanctuary.

\*Further the committee said the State Party was seeking to pursue hydrocarbon exploration activities within the original boundaries of the property, thus contributing to the loss of Outstanding Universal Value. The committee further consulted IUCN and being convinced that as a result of the reduction of the Sanctuary under Omani Law, the property has deteriorated to the extent that it has lost its Outstanding Universal Value and integrity;

\*And finally decided to delete the Arabian Oryx Sanctuary (Oman) from the World Heritage list.

2.The second deletion was the Dresden and Elbe Valley cultural heritage site in Germany in June 2009. This step was a response to the construction of a four-lane roadbridge in the heart of the property over the River Elbe—called the Waldschlosschenbrucke. The Observer Delegation of Germany in Thirtieth session Vilnius, Lithuania 8 – 16 July 2006 observed that the representative of the Mayor of Dresden took the floor to read out a statement saying that the bridge was intended to benefit the city and the city was willing to consider introducing measures to restrict heavy traffic on the bridge (Sanstos and Zobler, 2012). The Delegation of Norway in Thirtieth session Vilnius, Lithuania 8 – 16 July 2006 observed that it was a very serious case and clearly stated that the construction of the bridge would “irreversibly damage the values and integrity of the property”. In other words, if the bridge were constructed, the property should no longer be included in the World Heritage List (Gaillard and Rodwell, 2015).

Some highlights of DECISIONS ADOPTED AT THE 31st SESSION OF THE WORLD HERITAGE COMMITTEE (CHRISTCHURCH, 2007) are:

\*The committee decided to apply the reinforced monitoring mechanism in monitoring the state of conservation of the property.

\*Also decided to delete the property from the World Heritage List, in the event that the construction of the bridge has an irreversible impact on the outstanding universal value of the property, as discussed at the 30th session (Vilnius, 2006), and

\*Decides to retain the Dresden Elbe Valley (Germany) on the List of World Heritage sites in danger.

And finally, in 33rd session of the World Heritage Committee Sevilla, Spain 22-30 June 2009 it was delisted from the UNESCO World Heritage Site.

\*The third delisted site is Liverpool – Maritime Mercantile City (United Kingdom)

The city of Liverpool is situated close to the mouth of the river Mersey at a landward terminus that leads to the Irish Sea and Atlantic Ocean. Liverpool – Maritime Mercantile City, a site inscribed under the category of ‘group of buildings’ (heritage/old buildings) on the waterfront, for the criterion mentioned in table (1). The ill-defined construction on the waterfront and in the buffer zone and not considering the city’s historic urban landscape which ultimately deteriorated the outstanding universal value of the site (Gaillard and Rodwell, 2015).

Some highlights of the decision adopted at 33rd session of the World Heritage Committee Sevilla, Spain 22-30 June 2009 are:

1. According to the conclusions of the World Heritage Centre/ICOMOS mission to the property of October 2006 and in particular that the outstanding universal value of the site was not threatened although but a number of visual integrity as well as management issues were raised i.e.,

a) Overall management of new developments;

b) Lack of analysis and description of the townscape characteristics relevant to the Outstanding Universal Value of the property and important views related to the property and its buffer zone

c) Lack of clearly established maximum heights for new development, for the backdrops of the World Heritage areas as well as along the waterfront

d) Lack of awareness of developers, building professionals and the wider public about the World Heritage property, its outstanding universal value and requirements under the World Heritage Convention.

2. Also, according to the State Party’s report and its reference to the Management Plan of 2004, specifically requested the State Party to: a) clearly establish and respect prescribed heights; b) adhere to the townscape characteristics, wider values (building density, urban patterns and materials) and sense of place; c) inform the general public about the outstanding universal value of the property and its management;

3. The committee warned the state party that design briefs for new development do not take into account the Outstanding Universal Value, integrity and authenticity of the property, and the committee also requested the State Party to fully take them into account.

4. The committee said that the World Heritage Centre and ICOMOS to work together for the betterment of the site.

In 2012 the site was added in UNESCO World Heritage Sites Danger list.

And finally delisted in 44th session of the World Heritage Committee Fuzhou (China)/Online meeting 16-31 July 2021.

### C. CONSERVATION OF DARJEELING HIMALAYAN RAILWAY{DHR} (TOY TRAIN)

In twenty-third session Marrakesh, Morocco 29 November–4 December 1999 The Committee inscribed the site on the World Heritage List under criteria (ii) and (iv):

Criterion (ii): The Darjeeling Himalayan Railway is an outstanding example of the influence of an innovative transportation system on the social and economic development of a multi-cultural region, which was to serve as a model for similar developments in many parts of the world.

Criterion (iv): The development of railways in the 19th century has a profound influence on social and economic developments in many parts of the world. This process is illustrated in an exceptional and seminal fashion by the Darjeeling Himalayan Railway. The Committee drew the attention of the State Party to the recommendations of ICOMOS concerning

a) the creation of a heritage conservation unit;

b) the establishment of a buffer zone along the length of the railway line and the station and

c) the establishment of an adapted management plan.

The Observer of Germany underlined the importance of retaining the steam trains within the site. The Committee was assured by both ICOMOS and the Observer of India that, despite the movable character of the steam trains, they would most certainly remain in use due to their importance as a tourism attraction.

### D. Conservation issues of DHR presented to the World Heritage Committee in 2019

Following the submission of information by third parties, the World Heritage Centre sent four letters to the State Party (26 June 2017, 11 July 2017, 18 July 2018 and 14 February 2019) concerning the deteriorating state of conservation of the Darjeeling Himalayan Railway (DHR), which is part of the World Heritage property of Mountain Railways of India. The World Heritage Centre requested the State Party to verify the information received regarding: i) lack of monitoring and general maintenance; ii) serious encroachment by illegal construction; and iii) dumping of waste along the tracks.

### E. The UNESCO Office in New Delhi carried out a mission to Darjeeling and Kolkata (19–29 May 2018) and made the following observations

i) There appears to be no appropriate structure to care for the conservation of heritage assets and attributes that underpin the Outstanding Universal Value (OUV) of the property. Many of

the principal attributes of the property’s OUV have lost important structural and/or decorative components;

ii) The property’s boundaries do not appear to have been properly defined, since there is currently no clear map or established buffer zone;

iii) The property suffers from serious encroachment by illegal construction and from waste dumping along the tracks;

iv) The trains and tracks are suffering from insufficient maintenance; Many of the station buildings, which are identified as major attributes of the OUV of the property, have lost original fabric and have seriously deteriorated since the inscription of the property on the World Heritage List and its subsequent extensions (1999, 2004 & 2008). In most cases, this is due to ill-advised “modernization” efforts compounded by lack of maintenance. The buildings of Sonada and Gayabari stations, which were damaged during riots in 2017, have not been restored. At the time of inscription, in 1999, most of the 88-kilometre route of the DHR passed through either forest or tea garden landscapes. Currently, however, much of the DHR runs between illegally constructed houses and shops, and a lot of this encroachment is on a 20-metre corridor owned by the Northern Frontier Railway Zone and the Ministry of Road Transport. Illegal housing is so close to the railway in places that there is little or no space between units and the railway. Additionally, DHR steam locomotives use low-grade coal instead of steam coal produced for steam locomotives, which generates ash and smoke pollution and has a negative impact on the locomotive engines.

*F. Analysis and Conclusions of the World Heritage Centre, ICOMOS and ICCROM in 2019*

The mission report from the UNESCO Office in New Delhi and third-party information sent to the World Heritage Centre describe significant loss of original architectural elements from railway buildings and cumulative wear and tear on the locomotives and rolling stock of the railway since inscription. This is coupled with the impact of encroachment by illegal housing and commercial development, which has significantly altered the character of the railway corridor and its surrounding landscape and threatens the OUV of the property and its character.

The issues stem from the absence of a management system with appropriate focus on priorities for protection, maintenance and conservation and the capacity to implement these. There is also a general lack of understanding of the unique management needs of narrow-gauge heritage steam railways. In this regard, lack of suitably trained staff to operate the railway constitutes an important aggravating factor. There is an urgent need to clarify the boundaries of the property and to establish a buffer zone in order to ensure its protection, to define priorities for management and to maintain the railways’ relationship with the landscapes that each one helped to create. The committee also said that, between 2017 and 2019, the State Party has not responded to World Heritage Centre’s repeated requests for information regarding the lack of monitoring and general maintenance, serious encroachment by illegal construction and waste dumping along the tracks of the property. In view of these pressing issues, the Indian Railways’ initiative to set up a self-benefiting Fund-in-Trust

project to elaborate the development of the Comprehensive Conservation and Management Plan (CCMP) for the property should be welcomed. The finalization and implementation of the CCMP is a crucial priority that must also include the establishment of a dedicated Conservation and Management Unit for the World Heritage property.

*G. Decisions adopted by the Committee in 2019 are as follows:*

1. The State Party did not submit the information requested by the World Heritage Centre between 2017 and 2019 regarding the lack of monitoring and general maintenance, serious encroachment by illegal construction and waste dumping along the tracks of the property;
2. The outcomes of the 2018 mission to the property of the UNESCO Office in New Delhi expresses concern about the erosion of attributes bearing the Outstanding Universal Value (OUV), as a result of management issues faced by the property over the 20 years since its inscription, and failure to implement the recommendations formulated by ICOMOS at the time of inscription;
3. The committee gave a green signal to the initiative of Indian Railways to set up a self-benefiting Funds-in-Trust project in order to help develop a Comprehensive Conservation and Management Plan (CCMP) for the property to address longstanding issues, and requests the State Party to:
  - a) Implement this plan once it has been reviewed by the World Heritage Centre and the Advisory Bodies.
  - b) Establish a conservation and management unit for the property.
4. The committee said that the State Party should submit a proposal to the World Heritage Committee to define property’s boundaries and define a buffer zone, along with details of proposed policy and legal instruments to improve the protection and management of the property.
5. The committee also said that the State Party to work jointly with World Heritage Centre/ICOMOS for monitoring the state property and assisting the state party for preventing further erosion of the property’s Outstanding Universal Values and also for the conservation of the Darjeeling Himalayan Railway.

*H. Significance of Darjeeling Himalayan Railway on Darjeeling tourism*

Table(3): Percentage of tourist having ride in DHR from 2015-2019.

Year	Tourist inflow in Darjeeling	DHR passenger inflow	Percentage of tourist having ride in DHR
2015	517830	97378	18.80501323
2016	626899	104762	16.71114486
2017	231687	61199	26.41451614
2018	632637	118681	18.75973109
2019	597919	101527	16.98005917

Source: Darjeeling Tourism Department and DHR Elysia Building, Kurseong

From the above table we can see tourist inflow of Darjeeling, DHR passenger inflow and percentage of tourist having ride in DHR respectively from the year 2015-2019. The percentage of tourist having ride in DHR in 2015 is 18.80% of total tourist inflow in Darjeeling. The average percentage of tourist having ride in DHR for the five years is 19.52 nearly around 20%, which means 20 out of 100 tourists prefer having ride in DHR and it has been consistent throughout the years as can be seen from the above table.

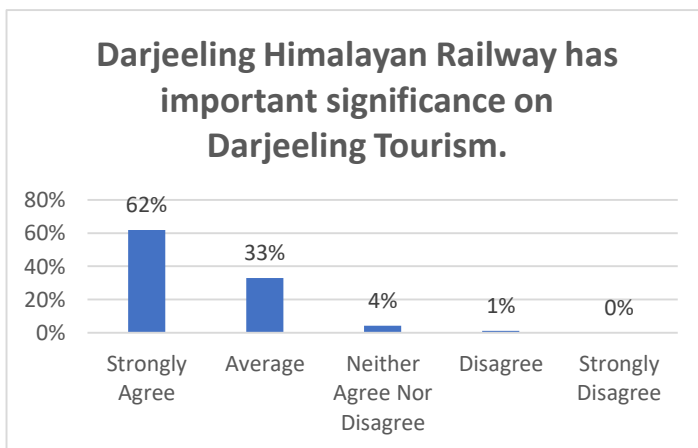


Figure (1): Tourist response on the question DHR has important significance on Darjeeling tourism.

From the above figure we can see that 81% of respondent believed that DHR still has important significance in Darjeeling Tourism. And one of my respondents said that ‘some people just come to experience a heritage hide in toy train at any cost as they don’t even know when they again get a chance to explore beauty of Darjeeling. Some tourists do not prefer to have a ride on DHR as it increases a length of stay in Darjeeling if they take a ride on DHR but still they believed DHR has important significance on Darjeeling tourism.

*I. Suggestions and Recommendations*

1. State party should co-operate with World Heritage Centre for conservation of Darjeeling Himalayan Railway.
2. A committee should be formed for investigation to look after the culprits who are responsible for burning Sonada and Gayabari Railway Station during the riots of 2017 and should be published in such a way that one should think twice before putting scratch on our Heritage Sites.
3. The Sonada and Gayabari Railway Station should be reconstructed as soon as possible.
4. There should be proper management and maintenance of DHR.
5. Illegal construction along the railway tracks should be stopped/monitored.
6. There should be a proper established buffer zone,so that illegal construction should be monitored.
7. In 2019 the DHR conducted a UNESCO funded 3 days engineering workshop for DHR, and more workshop should be done.

8. The history and importance of DHR should be added in the syllabus of high school to create awareness among the locals and tourist.

9. An initiative should be taken by DHR for increasing short distance journey

*J. Summary and Conclusion*

The reason behind the introduction of Darjeeling Himalayan Railway was mainly for commercial propose in the year 1880. Means of transport during 80s was not easier. Bullock cart, horse cart, etc was the only means of transport from Siliguri to Darjeeling and it was very time consuming. Thus, the invention of 2-gauge Railway made a drastic change in the Transportation system from plains to hills. During 1930s for the first time DHR faced a immense competition after the introduction of motor vehicle because car used to save 2-3 hr. During World War II (1939-45) it was not possible to transport large number of Troops in motor vehicles, so once again it played a vital rule in transporting military personnel and supplies to the numerous camps around Ghoom and Darjeeling. After the invention of new cars, it started losing its importance in commercial use but due to its natural beauty and journey between Siliguri to Darjeeling attracted in the toy train attracted tourist and those the propose DHR change from commercial to tourism sector.

UNESCO declared DHR as heritage site in 1999 for the conservation of Darjeeling Himalayan Railway, but due to several issues discussed above UNESCO had warned DHR for delisting from its heritage site. There are three sites which has been delisted till date, three countries was in favour of delisting, in 2015 February referendum was conducted and 67.92% voters of Dresden city favoured the construction of bridge “Waldschlosschenbrücke” to get rid of huge traffic and were unconcerned with UNESCO decision and its impact on tourism after delisting, Arabian Oryx Sanctuary reduced the sanctuary by 90% for the petroleum extraction and Liverpool – Maritime Mercantile City finally Liverpool – Maritime Mercantile wanted new development in the waterfront rather than sustaining the old architect and heritage buildings. not maintaining the buffer zone which threatening the Outstanding Universal Value and irreversible action on the environment (Godwin, 2010). They preferred development rather than sustainability or conservation of the Heritage sites; in other words, they had an alternative to sustainability/ to preserve the heritage sites (Sanstos and Zabler, 2012).

But this is not the case for DHR, it does not have any alternative development project substitute to DHR, rather Darjeeling is known for its beauty and DHR attracts tourist but if it gets delisted then there may be an adverse effect on tourism in Darjeeling and it will be embarrassing for our country in general and people of Darjeeling in particular. Also, UNESCO believes on sustainable development but if DHR get delisted an unhealthy development may occur which may benefit the economy of Darjeeling in the short run but in long run it will adversely affect the environment and tourism.

Therefore, the conservation/sustainability of heritage site is necessary and it can be observed from words of the Delegation of Kenya in Thirtieth session Vilnius, Lithuania 8 – 16 July 2006 in the case of Dresden Valley portrayed that "It appeared

to be another case demonstrating the conflict between conservation and development. However, recent case history showed that it was possible to effect change and stop inappropriate construction. The Committee should consider issuing a statement clarifying what could and could not be done”.

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