



United Nations  
Educational, Scientific and  
Cultural Organization

### Project title

Safeguarding the Mountain Railways of India World Heritage property: Development of Comprehensive Conservation Management Plan for the Darjeeling Himalayan Railway World Heritage boundaries through effective stakeholder empowerment

<b>UNESCO Contact:</b>	<p>Responsible Officer (<i>the person who will have ultimate responsibility and be accountable for delivering this project</i>) – Division, Field Office, institute</p> <p>Moe Chiba Programme Specialist for Culture UNESCO New Delhi</p> <hr/> <p>BSP/CFS Contact<sup>1</sup></p> <p>Jessica Jeavons, Bureau of Strategic Planning – Section for Bilateral Government Funding Sources</p> <p><a href="mailto:j.jeavons@unesco.org">j.jeavons@unesco.org</a></p>
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<b>Geographical scope/benefitting country(ies):</b>	<p>Darjeeling Himalayan Railway, Darjeeling District, West Bengal, India</p>
<b>Duration (in months):</b>	<p>24 months</p>
<b>Total funding requested:</b>	<p><b>USD 533,332- to be transferred in the equivalent INR (including 13 % Overhead cost)</b></p>
<b>Partner(s) institutions:</b>	<p><i>National Implementing agencies, NGO(s), multilateral and bilateral partners.</i></p> <p>UNESCO New Delhi office is the international implementing agency. Other partners include :</p> <p>Implementing Government Agencies in India:</p> <ul style="list-style-type: none"> <li>• Darjeeling Himalayan Railway</li> <li>• North East Frontier Railway</li> <li>• Indian Railways</li> </ul> <p>Associated Agencies:</p> <ul style="list-style-type: none"> <li>• International Council on Monuments and Sites (ICOMOS)</li> <li>• The International Committee for the Conservation</li> </ul>

<sup>1</sup> This can be added at a later date when a specific donor has been identified.

**Executive Summary:**

*In 120 words or less please summarise the objectives and activities of your project.*

- ⇒ *Issue(s) to be addressed*
- ⇒ *Development objectives to which the project will contribute*
- ⇒ *Overall Goal/Objective*
- ⇒ *Main expected results*
- ⇒ *Activities and outputs/deliverables*
- ⇒ *Main modalities of action*

The Mountain Railways of India is a railway heritage site on the UNESCO World Heritage List and are the earliest living examples of mountain railways in this region. Opened in 1881, the DHR's design applied ingenious engineering solutions to the problem of establishing an effective rail service through a mountainous and rugged terrain of great beauty.

Unfortunately in recent times, the IR, who is responsible for all the three sites as part of the Mountain Railways of India World Heritage property since 1999, has been confronted with several issues concerning the conservation, maintenance and management of these sites. The need of the hour is to fully understand in detail how to define heritage in the context of railways, the railway as a World Heritage property along with its heritage values, and how to protect, conserve, and manage railway heritage.

The project aims at assisting the North East Frontier Railway (NFR) in enhancing the conservation and management of the Darjeeling Himalayan Railway (DHR) by developing a **Comprehensive Conservation Management Plan (CCMP)** and establishing the framework for an effective management system, as well as **to serve as a model for the other Mountain railways of India**. The development of a CCMP will be accompanied with the execution of an onsite project to demonstrate the implementation of a CCMP on the ground level. The proposed project is part of the already existing collaboration between UNESCO New Delhi and the Indian Railways (IR). Recognizing the absence of strong definition of Outstanding Universal Value of the DHR and the guideline to translate the same into management practice, it was requested that UNESCO provides the technical assistance to IR in this project.

The project intends to:

- Establish a clear definition and delimitation of the boundaries of the World Heritage property
- Ensure the protection of the property and its OUV through an establishment of effective management system
- Build capacity of the Indian Railways, including its site managers and staff members of Mountain Railways of India World Heritage property

Proposed activities within the timeframe of 24 months include:

- Establishment of a project office
- Baseline survey on heritage assets of railway and the current management system
- Review of World Heritage OUV and clarification of World Heritage property
- Identification of issues, their assessment, and establishing management objectives
- Training workshops for site managers on conservation and management of railway heritage

- Development of Comprehensive Conservation Management Plan (CCMP)
- Development of Comprehensive Conservation Management (CCMP) Handbook.
- Development and implementation of a demonstration project to be agreed upon jointly between UNESCO and NRF. The necessary preparatory work for work plan development will be undertaken within the budget provided under this project, while the actual execution cost shall be met separately by NRF.

This two phased approach is expected to set standards and offer templates for other such complex linear sites in Asia. It will also create an opportunity for technical exchange with other railway World Heritage properties, international expert visits, and technical workshops to train for the conservation and management of railway heritage sites, and sourcing of technical expertise for the development of the CCMP.

## 1. RATIONALE AND BACKGROUND

*Outline the overall purpose of the project, the target beneficiaries and the expected outcomes*

### 1.1 Overall Purpose &Relevance

**What** is the project aiming to achieve?

The project aims at assisting the North East Frontier Railway (NFR) in enhancing the conservation and management of the Darjeeling Himalayan Railway (DHR) – part of the serial World Heritage property of Mountain Railways of India – by developing a Comprehensive Conservation Management Plan (CCMP) and establishing the framework for an effective management system.

**Why** is this project needed? Clearly state the problem this project will address and the evidence base for its justification. Explain how the project responds to assessed needs and problems (in the country/region/globally<sup>2</sup>. If appropriate refer to the policy priority or (ODA) strategy of the donor with which the project is aligned.

Railway World Heritage properties are examples of highly innovative and highly complex socio-technical system from all over the world. Some significant examples include the Semmering Railway in Austria, Rhaetian Railway in the Albula and Bernina Landscapes in Switzerland and the Mountain Railways of India. These outstanding railway heritage sites brings to the forefront the many ways in which railways have contributed to the social, economic, political, cultural, and technical evolution of almost every country around the globe.

India, one of the earliest signatories to the World Heritage Convention, has two railway heritage sites currently on UNESCO World Heritage List – the Mountain Railways of India and the Chatrapati Shivaji Railway Terminus, Mumbai. The Mountain Railways of India are earliest living examples of mountain railways in this region, constructed at the end of the 20th century which opened up high valleys and high altitude plateaux to transport and passenger travel options. Still operational today, these hill passenger trains cross regions of remarkable beauty and are outstanding examples of bold, ingenious engineering solutions concerning the establishment of an effective rail service through rugged mountainous terrain.

The Darjeeling Himalayan Railway(DHR) was the first industrial heritage site in Asia to be inscribed on the World Heritage List in 1999 as the Mountain Railways of India and was later extended to include the Nilgiri Mountain Railways (2005) and the Kalka Shimla Railway.(2008)

Darjeeling, situated at an elevation of over 2,000 meters in the eastern Himalaya, was the first hill-station of British India and also the first to be served by rail. The origins of Darjeeling and its railway are part of the expansion of British India during the last decades of East India Company

<sup>2</sup>Depending on the scope of the project.

rule.

Opened in 1881, the DHR's design applied ingenious engineering solutions to the problem of establishing an effective rail service through a mountainous and rugged terrain of great beauty. The narrow gauge of this rail was suited to the terrain, and permitted the transportation of passengers and goods in a way that had a profound impact on the social and economic development of the Darjeeling area. The combination of narrow gauge and zigzag reverses was the first in the world, and as such it is of exceptional technological interest. The DHR does not feature any grand structures, however the remarkable features of the DHR are its steep grades and low-cost but yet effective expedients its engineers adopted to enable it to climb high elevations in short distances.

It was a profitable line from the start as both the revenue and traffic grew rapidly, as did Darjeeling district's economy as a whole. Despite its small size, this is a very significant railway in any terms. It has helped make Darjeeling synonymous with quality tea, by breaking the transportation bottleneck which inhibited the district's economic growth in the late 19th century. It was the first hill railway of its type, and therefore, was the precedent for the later Niligiri, Shimla, and Matheran lines in India, as well as in Asia for railways such as the Dalat line in Viet Nam and the Maymyo line in Myanmar. It demonstrated, astonishingly well as to what could be done with a very narrow-gauge railway in terms of the traffic that could be conveyed, of budgeted construction, and of the rugged terrain that could be overcome.

The DHR, for all its charms, was and remains to today, a slow railway. In recent times with improved roads, the traffic to Darjeeling through trucks and buses has considerably increased. This has resulted in loss of freight traffic and passenger figures. The IR, who is responsible for all the three sites as part of the Mountain Railways of India World Heritage property since 1999, has also been confronted with several other issues that concern the conservation, maintenance and management of these sites. These issues highlight the need to take steps that would help fully understand in detail, how to define heritage in the context of railways and how to protect, conserve, and manage railway heritage.

Also, the current situation requires a better understanding of the railway as a World Heritage property, along with the heritage values of all elements within and attributes of the site. The different dimensions of complexity of the site are due to the property consisting of not only the permanent railway tracks, but also the many associated buildings-stations, goods sheds, (go downs) workshops, locomotive and rolling stock sheds, railway residences, etc., which can be found across the varied terrain. Most importantly, site-specific elements and attributes that give the property its OUV also need to be properly defined, based on the criteria of its inscription. These elements must thereafter be preserved and managed. This requires a detailed understanding of not only the property's OUV, but also aspects related to the authenticity, the

integrity, and the establishment of boundaries and a buffer zone of the site.

Some pressing conservation issues which affect DHR specifically include:

- Lack of inventory of historic buildings that have been demolished, renovated, restored or reconstructed.
- Rampant construction along the line and in urban settlements.
- Original rolling stock has been taken out of service and scrapped, altered and renewed.
- Tracks have been renewed and sleepers changed inappropriately; unclear sharing of responsibilities between the Hill cart road and railway tracks.
- Lack of clarity on the adaptive re-use of the Tindaria workshop building.
- Introduction of new rolling stock which may not be appropriate.
- Lack of management plan for the World Heritage property.
- Undefined buffer zone along the length of the DHR.
- Landslides and other environmental problems.

DHR World Heritage property is under the responsibility of NFR, with its headquarter in Guwahati, capital of the State of Assam. Although DHR has its own site manager, the office lacks the technical capacity in dealing with issues, which confront the conservation of the DHR World Heritage property. On that note, there is also lack of institutional and organizational capacity, as well as specific heritage expertise within the NFR, and a general lack of understanding as to how railways as World Heritage property are to be conserved in practical terms. Moreover, DHR does not have appropriate management mechanisms for addressing planning related issues with special regard to heritage and integrated in the existing administrative framework.

There are several authorities operating in the regional context of the World Heritage property that includes the Darjeeling Gorkha Hill Council, Darjeeling, Kurseong, and Siliguri Municipality, the Darjeeling District, State Government of West Bengal. There is lack of meaningful collaboration and clear governance arrangements to deal with regional issues affecting the DHR with special regard to the World Heritage boundaries and buffer zone management.

**Why UNESCO?** Please i) explain why UNESCO is well placed to address this (these) issue(s) (for example with regard to its comparative advantage and previous track record in delivering such programmes) and, ii) How this project will complement existing UNESCO programme(s), and/or build on previous achievements (refer to the expected result under UNESCO's regular Programme and Budget to which this project will contribute).

The UNESCO World Heritage Convention requests through the relevant

provisions in the Operational Guidelines that management plans are documented and proven management systems are put into place. They are crucial to effectively implement the World Heritage Convention. The management of cultural heritage under the Convention is through processes by which the OUV of the property is protected and cultural heritage resources are given consideration in both the local and global contexts, including issues such as local population pressures, rapid urbanization, increasing international tourism and climate or global change. The way in which a World Heritage property is managed thus has an impact on its values, integrity and authenticity. Therefore, all World Heritage properties are required to have a functional management plan.

UNESCO has been collaborating with the IR on several programmes in order to improve the protection, conservation and management of railway heritage. The basis of this collaboration was through an establishment of Joint Cooperation Programme between UNESCO New Delhi and National Rail Museum, Ministry of Railways in 2007, aimed at developing the institutional capacity of their department and establishing high standards in conservation, education, interpretation and presentation of railway heritage.

In October 2007, a draft 'Outline for the preparation of a Comprehensive Management Plan for the Darjeeling Himalayan Railways as part of the Mountain Railways of India World Heritage Site' was prepared by UNESCO New Delhi. It was partially based on the 'Integrated Management Plan for the Kathmandu valley World Heritage Site' which has been considered a model for the development of integrated management plans in all regions of the world. (WHC-07/31.COM/7A. Add, p.23)

Within this context, it has been suggested by UNESCO to the IR to set-up a World Heritage Site Management Office (WHSMO) which would address all matters concerning the conservation and management of railway heritage as well as establish and develop the CCMP for the Mountain Railways of India World Heritage property.

In addition, UNESCO has also been active in providing technical advice to the IR, suggesting measures to be taken to safeguard the Mountain Railways of India World Heritage property against natural and man-made disasters, demolition, inappropriate restoration or reconstruction and developments along the rail lines and its surrounding urban settlements. UNESCO has undertaken several missions and organized consultative meetings and workshops for railway officials aimed at developing an overall heritage conservation mind-set within the DHR management.

In view of the challenges faced by the Mountain Railways of India World Heritage property and as a result of the continued engagement over the last few years, the IR requested UNESCO to continue facilitating in the sharing of technical expertise to improve the conservation and

	<p>management of the Mountain Railways of India World Heritage property, in particular to help developing the CCMP for the DHR by the end of this two-phased project.</p> <p>The project will contribute to the overarching objective of “Fostering cultural diversity and intercultural dialogue and a culture of peace,” which is central to UNESCO’s 35 C/4 guiding the current UNESCO Medium Term Strategy. (2014 – 2019) Furthermore, the project’s objective of strengthening the integrated approaches towards sustainable conservation and management of the DHR World Heritage property of the Mountain Railways of India contributes directly to UNESCO’s 36 C/5’s Biennial Sectoral Priority of “Protecting and promoting heritage and cultural expressions” and its Main Line Action of 1 expected result “Contribution of World Heritage properties to sustainable development enhanced.”</p> <p><i>(maximum 500 words)</i></p>
<p><b>1.2 Beneficiaries and other Stakeholders</b></p>	<p><b>Who are the direct beneficiaries?</b></p> <p>The beneficiaries include the Indian Railways, including its site managers and technical staff members.</p> <p>The primary beneficiaries of the project are:</p> <ul style="list-style-type: none"> <li>• Site managers and other technical personnel from the DHR responsible for the implementation of the World Heritage Convention at the DHR World Heritage property.</li> <li>• Indian Railways as an organization, namely through the office of ED Heritage, the NF Railway, and the DHR</li> <li>• Associated authorities and agencies from central government, state government, local government departments and other concerned agencies, etc.</li> </ul> <p>The IR has further suggested the project to provide the site managers of DHR, Kalka Shimla Railway, and Nilgiri Mountain Railway an opportunity to participate in study visits, training workshops, share and learn from technical expertise and knowledge resources from around the world in order to enhance their technical capacity in conservation and management of the Mountain Railways of India World Heritage property.</p> <p><b>Who are the other key stakeholders affected by the problem and who are the stakeholders influential in solving the problem and how have beneficiaries and stakeholders been incorporated and involved in project design and delivery?</b></p> <p>The other stakeholders who are affected by the problem and will impact the outcomes of the project include:</p> <ul style="list-style-type: none"> <li>• Local communities, NGOs, and community-based organizations that advocate the interests of improving the management practices in the World Heritage property and buffer zone.</li> <li>• Academics and conservationists and members of the general public of Darjeeling as well as the highly active interest group comprising of people based in India and abroad that are involved</li> </ul>

	<p>in promoting awareness of, interest in, and support for the DHR and the other railway heritage sites in India.</p> <ul style="list-style-type: none"> <li>• A whole range of professionals including conservation architects, railway engineers, sociologists, urban and transport planner, landscape, environment, railways conservators, tourism expert and risk management expert.</li> </ul> <p>The development of CCMP for the DHR is to be seen as a process involving participation of the site managers, stakeholders, and multidisciplinary experts in the field. The designated site manager/ Director DHR would assume the lead role in facilitating the project work on site and helping in coordinating with other stakeholders.</p> <p><b>Ownership:</b> <i>What critical measures are taken for ensuring the ownership, rights, interests, opportunities, needs and participation of the key beneficiary groups?</i></p> <p>The entire project is intended and designed to train the Site managers and other technical personnel from the DHR through their involvement in the works of the UNESCO Consultants, thereby laying the basis the creation of local office for the management of DHR World Heritage Site. At each field visit of the Consultants, training workshops will be organized systematically with the officers and the technical personnel of DHR to discuss the work plan, process and the outcome.</p>
<p><b>1.3 Overall and specific objectives</b></p>	<p><i><b>What</b> is the desired change that the project intends to bring about? Outline the overall aim of the project, state specific objectives, expected impact and long term legacy<sup>3</sup>.</i></p> <p>Overall aim: The overall objective of the project is to develop the effective management system that strengthens the conservation, management and monitoring of the Mountain Railways of India World Heritage property and contributes to its sustainable development in the context of an integrated management framework. The project intends to focus on participatory and inclusive working methods aimed at all stakeholders, which will promote the sharing of knowledge and good practices in the conservation and management of railway heritage.</p> <p>The specific objectives of this project are:</p> <p>(a) Establish a clear definition and delimitation of the DHR to define the boundaries of the World Heritage property.</p> <ul style="list-style-type: none"> <li>• Identify and document the attributes and elements that contribute to the OUV of the property and verify their heritage values.</li> </ul>

<sup>3</sup> Please see of [RBM as applied by UNESCO. Guiding Principles](#) and the [UNDG Results Based Management Handbook](#)

- Formulate a Statement of OUV which will be the key reference for the future effective protection and management of the property.
- Establish the clear definition and delimitation of the boundaries based on the criteria for inscription, statement of OUV, statement of authenticity and integrity.

(b) Develop the effective management system for the DHR.

- Determine the key issues (including capacity at institutional and organizational level of IR) and management objectives for the boundaries and define actions to address these issues with an appropriate conservation approach.
- Establish a Comprehensive Conservation Management Plan which can deal with a wide range of issues, pertaining to the conservation and sustainable development of the site.

(c) Capacity building of institution, site managers, and staff members of Mountain Railways of India World Heritage property.

- Establish the project office as the future WHSMO under the responsibility of the NFR, which would have conservation of the railway heritage values as a high priority in its management, and functioning under a set of regulations that respond to the principles of conservation.
- Undertake coordination and training activities for site managers of Mountain Railways of India World Heritage property.
- Develop a concept note for restoration / renovation of Sonada station and Ghum station museum (indoor and outdoor) as a model case; review the detailed project report to be prepared by Indian Railway and advise improvement as required.

(d) Technical collaboration and knowledge exchange with other international railway World Heritage properties.

- Facilitate the establishment of and strengthen international collaboration and technical partnership with other countries in this field by helping organizing joint meetings and international workshop aimed to discuss issues concerning railway heritage and different approaches to conservation and management of railway heritage, its challenges and opportunities and sharing and promoting good practices.

Expected results:

The development of CCMP for DHR shall lead to the establishment of a properly documented management system which will ensure the protection and preservation of the Outstanding Universal Value (OUV) of

	<p>the property. It shall also help build in-house technical capacity and establish systems within the DHR site management office for the development and implementation of CCMP.</p> <p>Long term legacy:</p> <p>The project will result in setting standards and templates for other such complex linear sites in Asia. It will also create an opportunity for technical exchange with other railway World Heritage properties, international expert visits, and technical workshops to train for the conservation and management of railway heritage sites, and sourcing of technical expertise for the development of the CCMP.</p> <p>The project will lead to the development of the institutional capacity of the IR department and establish high standards in conservation, education, interpretation and presentation of railway heritage in India.</p>
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<b>1.4 Expected results and outputs/deliverables</b>			
	<b>Performance indicator (PI)</b> (a maximum of three):	<b>Means of verification (M)</b> (data source):	<b>Quantitative and/or qualitative Target (T)</b> (on the basis of baseline data (b)):
<b>Expected Result N°1</b> Protection of the property and its OUV ensured through an establishment of effective management system	<b>PI 1:</b> CCMP developed with the following components: (a) Boundaries of DHR defined (b) Graded inventory and GIS map within the World Heritage boundaries completed; (c) Management objectives, plan of action and conservation approach defined	M 1: CCMP	T 1 and (b 1): 1 CCMP (0)
<b>Activity 1 : Desk top and Field surveys &amp; drafting of CCMP</b>			
<b>Output/deliverable N°1.1</b> Desktop research on cultural heritage resources, issues, and present management system	<b>PI 1:</b> Quality of data and findings	<b>M 1:</b> Consultants' report under UNESCO contract	<b>T 1 and (b 1):</b> 1 report (0)
<b>Output/deliverable N°1.2</b> Mapping: Total station survey of the DHR World Heritage boundaries.	<b>PI 1:</b> Quality of data and findings	<b>M 1:</b> Consultants' report under UNESCO contract	<b>T 1 and (b 1):</b> 1 report (0)
<b>Output/deliverable N°1.3</b> Documentation and identification of cultural heritage resources, such as tangible and intangible heritage.	<b>PI 1:</b> Quality of data and findings	<b>M 1:</b> Consultants' report under UNESCO contract	<b>T 1 and (b 1):</b> 1 report (0)
<b>Output/deliverable N°1.4</b> Disaster vulnerability and risk assessment	<b>PI 1:</b> Quality of data and findings	<b>M 1:</b> Consultants' report under UNESCO contract	<b>T 1 and (b 1):</b> 1 report (0)

<b>Output/deliverable N°1.5</b> Review of existing management framework, such as institutional framework and legal framework	<b>PI 1:</b> Quality of data and findings	<b>M 1:</b> Consultants' report under UNESCO contract	<b>T 1 and (b 1):</b> 1 report (0)
<b>Expected Result N°2</b> Capacity of the Indian Railways, including its site managers and staff members of Mountain Railways of India World Heritage property enhanced	<b>PI 1:</b> Quality of training tool <b>PI 2:</b> # and quality of training workshops	<b>M 1:</b> Handbook <b>M 2:</b> Workshops report, feedback of the railway officers	<b>T 1 and (b 1):</b> <b>T 2 and (b 2):</b>
<b>Activity 2 :</b> Preparation of Handbook on CCMP for Railway technical officers			
<b>Output/deliverable N°2.1</b> Handbook	<b>PI 1:</b> Quality of Handbook	<b>M 1:</b> Handbook and Feedback from Railway officers <b>M 2:</b>	<b>T 1 and (b 1):</b> 1 Handbook (0)
<b>Activity 3:</b> Consultation & training workshops on CCMP development			
<b>Output/deliverable N°3.1</b> 2 Training workshop for site managers and technical staff members respectively on (a) on documentation and preparation of inventories for railway heritage; and (b) demonstrative GIS based interpretation and processes for the utilization of GIS.	<b>PI 1:</b> Quality of trainings; <b>PI 2 :</b> # of relevant participants <b>PI 3 :</b> learning achievement of the participants	<b>M 1:</b> Workshop report <b>M 2:</b> Feedback of the participants and trainers	<b>T 1 and (b 1):</b> 2 workshops fully organized (0) <b>T 2 and (b2) :</b> At least 5 key officers from IR attending
<b>Output/deliverable N°3.2</b> 4 Review meetings with IR.	<b>PI 1:</b> Quality of discussion; <b>PI 2 :</b> # of relevant participants	<b>M 1:</b> Meeting report <b>M 2:</b> Feedback of the participants	<b>T 1 and (b 1):</b> 4 review meetings fully organized (0) <b>T 2 and (b2) :</b> At least 5 key officers from IR attending
<b>Output/deliverable N°3.3</b> Development of concept note for demonstration project (Sonada station and Ghum museum)	<b>PI 1:</b> # of NFR officials participating the project development and execution process;	<b>M 1:</b> Report of the demonstration project	<b>T 1 (b 0)</b> One demonstration project

## 2. APPROACH AND METHODOLOGY

### 2.1 Implementation strategy

#### **Overall Strategic Approach**

*How will the project objectives be achieved? Clearly describe the overall strategic approach to be followed.*

The proposed project is Phase 1 of a two- phased project. Phase 1 is envisaged as the phase for developing a CCMP for the DHR World Heritage boundaries. At the end of Phase 2, it is expected that DHR will have the CCMP for both the World Heritage boundaries and buffer zone and established management system. It is envisioned to take approximately 5years to complete 2 phases. The following explains briefly the activities of each phase:

Phase 1:           Development of CCMP for the World Heritage boundaries (24 months)

Phase 2:           Development of CCMP for the buffer zone (36months)

*How is gender equality addressed in the approach?*

NA

#### **Description and sequence of activities<sup>4</sup>**

*What are the key activities which will lead to the outputs/deliverables and results described above? How will the activities lead to the outputs/deliverables and expected results? With regard to the latter, describe the intervention logic to achieve desired objectives – beginning with inputs, moving through activities and outputs/deliverables, and culminating in the expected results<sup>5</sup>.*

Activities:

#### **Year 1**

- 1.0 Establish the project office for coordinating CCMP related activities within DHR. (Month 0 – 3)
- 1.1 Desktop research on cultural heritage resources, issues, and present management system. (Month 1 – 6)
- 1.2 Mapping: Total station survey of the DHR World Heritage boundaries. (Month 1 – 6)
- 1.3 Documentation and identification of cultural heritage resources, such as tangible and intangible heritage.( Month 1 – 6)
- 1.4 Disaster vulnerability and risk assessment. (Month 1 – 6)
- 1.5 Review of existing management framework, such as institutional framework and legal framework. (Month 1- 6)

<sup>4</sup> In the event that it is necessary to undertake a needs assessment to complete project design and /or to be able to present a detailed budget, use the following formula "(X) months after the start of project activities, when the situation is well assessed, a revised log frame and more detailed budget will be submitted to the donor for approval".

<sup>5</sup> For more information on the 'results chain' see P.12 of [RBM as applied by UNESCO. Guiding Principles](#) and P.12 to 15 of the [UNDG Results Based Management Handbook](#)

- 1.6 Preparatory research and development of execution plan for a demonstration project (Month 1 – 8)
- 1.7 Training workshop for site managers and technical staff members on documentation and preparation of inventories for railway heritage. (Month 6 or 7)
- 1.8 **1st Review Meeting of the project team with IR** (Month 6 – 7)
- 1.9 Training workshop on demonstrative GIS based interpretation and processes for the utilization of GIS.( Month 6,7 or 8)
- 1.10 Develop a graded inventory for cultural heritage resources. (Month 7 – 10)
- 1.11 Assess all findings and defining the World Heritage property. (Month 7 – 10)
- 1.12 **Second Review Meeting of the project team with IR** (Month 12 or 13)

## **Year 2**

- 2.1 Develop conservation approach and management objectives for the World Heritage boundaries. (Month 13 – 15)
- 2.2 Develop management framework and plan of action for the DHR boundaries. (Month 13 – 15)
- 2.3 Develop a disaster risk management plan and tourism management plan. (Month 13 – 15)
- 2.4 Develop a draft CCMP for the DHR World Heritage property. (Month 12 – 18)
- 2.5 Execution of a demonstration project (Month 13 – 20)
- 2.6 **Third Review Meeting of the project team with IR. (Month 15 or 16)**
- 2.7 Develop a draft Comprehensive Conservation Management Handbook. (Month 18–20)
- 2.8 **Final Review Meeting of the Project Team with IR (Month 21 or 22)**

### Project outputs:

The output of the Phase 1 is the CCMP for the World Heritage boundaries which consist of:

- Complete graded inventory and GIS map within the World Heritage boundaries.
- Defined World Heritage property.
- Management objectives, plan of action and conservation approach.
- IR staff trained
- Comprehensive Conservation Management Framework.
- Comprehensive Conservation Management Handbook.
- Concept note for demonstration project (Sonada and Ghum) developed.

Note: The CCMP will only contain information and decisions that have been reviewed, acknowledged and accepted by the respective authorities.

	<p>Expected results:</p> <p>In order to achieve the project’s immediate objective, the project is expected to deliver the following results:</p> <ul style="list-style-type: none"> <li>• The DHR as a component of the Mountain Railways of India World Heritage property is clearly defined.</li> <li>• Appropriate management framework established through the development of CCMP.</li> <li>• Enhanced capacity of Indian Railways, including its site managers and technical staff members both in terms of knowledge and skills for the conservation management of railway World Heritage property through various in-service training workshops.</li> <li>• Enhanced conservation and management standards for all Mountain Railways of India World Heritage property by way of international collaboration.</li> </ul> <p><i>Please include a work plan as Annex B (see enclosed format).</i></p>
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<p><b>2.2 Risk analysis and mitigation</b></p>	<p><i>Please outline the main risks (physical, environmental, political, economic and social risks) to successful delivery of this project and achievement of its objectives indicating whether they are high, medium or low.</i></p> <p><b>How</b> will these risks be mitigated? If the risks are outside the project’s direct control, how will the project design address them? How will these risks be managed and mitigated?</p> <ul style="list-style-type: none"> <li>- The DHR area is prone to heavy monsoon with frequent landslides, making the access to the project sites potentially difficult. This would be mitigated by planning the field survey in the right timings while the monsoon period may be allocated for consultation and coordination with the Government officials.</li> <li>- Darjeeling has concerns for political instability due to the occasional insurgence of local ethnic groups; however given the full support of local Government and local railway office given to the project, the progress of project would not be jeopardized.</li> </ul>
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<p><b>2.3 Sustainability and exit strategy</b></p>	<p><b>How</b> will the benefits of the project be sustained after funding and the technical support provided under the project have come to an end?</p> <p><b>What</b> are the assumptions and/or mechanisms (e.g. capacity building, institutions, funding arrangements, transfer of responsibilities) put in place regarding the continuation of activities and benefits (outputs/deliverables, results) after the funding has ceased?</p> <p>Long-term sustainability: phasing out of external assistance and gradually increasing the responsibility of railway institutions: World Heritage Site Management Office (WHSMO) is expected to become fully functional upon completion of the Phase 1 so that it can start the implementation of the CCMP by fully trained staff, while UNESCO can advise its progress. By the end of Phase 2, the WHSMO shall assume its full responsibility.</p>
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	<p>The development of the CCMP would be extended to the buffer zone of the DHR World Heritage property. The extension of Phase 1 of the project will be undertaken based on provision of funds by the donor and WHSMO's functionality.</p> <p>The development of CCMP for DHR shall lead to the establishment of a properly documented management system which will ensure the protection and preservation of the Outstanding Universal Value (OUV) of the property. It shall also help build in-house technical capacity and establish systems within the DHR site management office for the development and implementation of CCMP.</p> <p>After the completion of CCMP in 24 month, it is proposed that IR and UNESCO would spend additional 36 months to test the application of CCMP by expanding the scope of management to the extended areas surrounding the core WH property and by involving a larger segment of stakeholders directly or indirectly impacting on the management of the DHR World Heritage Property.</p> <p><b><i>What tools and processes will put in place regarding the replication and/or scaling-up of activities?</i></b></p> <p>Through this project, the IR intends to provide the site managers of DHR, Kalka Shimla Railway, and Nilgiri Mountain Railway an opportunity to participate in study visits, training workshops, share and learn from technical expertise and knowledge resources from around the world in order to enhance their technical capacity in conservation and management of the Mountain Railways of India World Heritage property, sustaining such efforts with the right expertise.</p> <p>This project also includes the plan to guide other two railway sites of the Mountain Railways of India World Heritage property by addressing management issues which span various sites, and which supports the common features of each but does not hamper the implementation of individual, tailor made, comprehensive management plan for each line.</p>
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### 3. PROJECT MANAGEMENT AND IMPLEMENTATION

- **Who** will be carrying out the different project activities? (*Outline the project implementation and management arrangements including a clear description of the roles and responsibilities of UNESCO and each of the partners*).

#### **Services to be provided by UNESCO**

With the funds made available to UNESCO for this project, it will provide for: (i) setting-up and hiring of staff for the project office including the procurement of required materials, supplies, other necessary equipment to operationalize the project office, (ii) hiring international experts specialized in conservation and management of railway heritage, and (iii) facilitating institutional arrangements with international organizations and institutions which may provide assistance for the project. Concerned international organizations and agencies, such as ICOMOS and TICCIH will be invited by UNESCO for the proposed international workshop on the railway heritage as necessary. UNESCO would also help in developing exchange and cooperation with the IR in the field of conservation and management of railway World Heritage properties with partners such as the Rhaetian Railway, Switzerland, and the Semmering Railway of Austria.

#### **Responsibilities of the Indian Railways**

NFR will provide a building which will house the project office and provide the space for the preparation of the DHR CCMP. It will also provide the expertise of its staff, the administrative and logistical support of the project office and the project throughout the duration of the project. While UNESCO provides the initial establishment of the project office, NFR will be required to initiate necessary administrative measures to officially incorporate the project office at Kurseong to be the permanent institutional entity funded and run by IR/DHR as the WHSMO.

Other two railway heritage sites within the Mountain Railways of India World Heritage property will provide their personnel to participate in the various workshops and consultation meetings to be held during the project.

Considering the limited budget provided for this phase of the project, participation of outside stakeholders in various workshops and meetings will be requested to be on a self-financing basis, in partnership with individual institutions or organizations.

**Project coordination**

**UNESCO New Delhi** will: (i) provide administrative backstopping, (ii) liaise with concerned government officials at national, state and local level, (iii) provide technical support in collaboration with implementation partners, (iv) monitor and evaluate performance, including review of project outputs, and (v) report on implementation progress to relevant sectors at UNESCO Headquarters and to the donor.

The on-site project coordination will be carried out by the project office for the full duration of the project. It will be responsible for the coordination of various activities related to the project with logistical support of the NFR.

With the assistance of NFR, UNESCO would hire a **project officer** who would be in charge of the project office during this phase of the project. The project officer will be responsible for establishing the day to day functions of the project and will coordinate between the consultants appointed by UNESCO and different department of the Indian Railways (electrical, mechanical, etc.) and ensure sourcing and sharing of information between them. The project officer will additionally facilitate the coordination between site managers of the Mountain Railways of India World Heritage property and organization of workshops and other events in the lieu of the project.

UNESCO will engage **experts in railway heritage conservation and management** who would act as facilitators for the preparation of the CCMP, They will: (i) assist in the identification of technical consultants for the project, (ii) ensure the quality and timely deliverables of all the thematic areas of studies, (iii) develop capacity building activities for site managers, (iv) assist in the organization of meetings and conferences with international partners and experts, and (v) compile all recommendations to formulate the preliminary CCMP and related documents.

<b>4. MONITORING, EVALUATION, LESSON LEARNING</b>	
<b>4.1</b>	<p><i>How will the performance of the project be monitored and evaluated?</i><sup>67</sup></p> <p>Monitoring and evaluation will be undertaken by <b>UNESCO</b> in coordination with the IR. This will be conducted on the basis of selective field visits, reports from the on-site project implementers and two six-monthly review meetings.</p> <p><b>ICOMOS, TICCIH and UNESCO’s World Heritage Centre</b> maybe invited to join the evaluation and review meetings, provided that they can make the travel expenses available for the representative(s).</p>
<b>4.2</b>	<p><i>How will you involve beneficiaries and other stakeholders in</i></p>

<sup>6</sup> Monitoring, reporting and evaluation processes and tools should be designed to capture information on activities, outputs/deliverables and expected results. At the output/deliverable and expected results levels adequate provisions for data collection should be made covering all performance indicators (with associated quantitative and/or qualitative targets), starting with a baseline for each performance indicator. Information on key performance indicators should be collected periodically in order to track progress towards project implementation, output/deliverable delivery and achievement of the expected results. Please refer to a) the [monitoring and reporting guidelines](#) and b) the [Guidance Note on Evaluation](#) of 07.11.12

<sup>7</sup> If appropriate, indicate the specific reporting requirements established by the donor and consistent with the provisions in the funding agreement.

	<p><i>monitoring and evaluation?</i></p> <ul style="list-style-type: none"> <li>- Monitoring and evaluation of the project is provided by UNESCO New Delhi office, who in regular communication with the consultants and the local bodies, and through field missions, would check the progress of work.</li> <li>- Quality of consultants work will be checked through their deliverables under UNESCO contracts. UNESCO will also have the opportunity to benefit from the support of ICOMOS India to conduct the peer review of the works of the Consultants.</li> <li>- Beneficiaries and stakeholders will be consulted primarily during the two training workshop and 4 review meetings foreseen under the project.</li> </ul> <p><i>NB: please remember to include adequate provisions for monitoring and evaluation in the budget, in accordance with the available guidelines.</i></p>
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<b>5. VISIBILITY</b>
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<b>5.1</b>	<p><i><b>How</b> will the proposed project contribute to raising the visibility of UNESCO and the donor in the project area: describe the overall communication strategy/approach (e.g. media coverage, use of the logo on the publications, and other displays of the donor’s support, participation of the donor in project events, joint press conference, exposure on UNESCO’s or other web sites).</i></p> <p>As project implementation is underway, a comprehensive information and publicity plan can be developed by UNESCO in close consultation with the local coordinating project office, and the NFR, in order to publicize the project’s progress and outputs at the local, state, and national and international level. In addition, UNESCO together with the local coordinating project office will strive to mobilize the media to cover the activities locally and nationally. Representatives of the IR will be invited to public events that may be organized in the context of the project such as the opening or closing ceremonies of different workshops, review meetings, etc. It will be clearly stated in all reports, publications and other project materials that the project was made possible with the financial support of the donor, IR, Government of India.</p>
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<p><b>Annex a Project Logical framework (Log frame) – Not Applicable (Deleted)</b>  <b>Annex B Work plan</b>  <b>Annex C Budget (by UNESCO Budget Line or by Activity)</b></p>
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## Annex B: Work plan

No.	Activities	Months																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1.0	Establish the project office for coordinating CCMP related activities within DHR.	x	x	x																					
1.1	Desktop research on cultural heritage resources, issues, and present management system.	x	x	x	x	x	x																		
1.2	Mapping: Total station survey of the DHR World Heritage boundaries.	x	x	x	x	x	x																		
1.3	Documentation and identification of cultural heritage resources, such as tangible and intangible heritage.	x	x	x	x	x	x																		
1.4	Disaster vulnerability and risk assessment	x	x	x	x	x	x																		
1.5	Review of existing management framework, such as institutional framework and legal framework	x	x	x	x	x	x																		
1.6	Preparatory research and development of execution plan for a demonstration project	x	x	x	x	x	x	x	x																
1.7	Training workshop for site managers and technical staff members on documentation and preparation of inventories for railway heritage.							x	x																
1.8	<b>1<sup>st</sup> Review Meeting of the project team with IR</b>							x	x																
1.9	Training workshop on demonstrative GIS based interpretation and processes for the utilization of GIS.									x	x	x													
1.10	Develop a graded inventory for cultural heritage resources.									x	x	x	x												
1.11	Assess all findings and defining the World Heritage property									x	x	x	x												
1.12	<b>Second Review Meeting of the project team with IR</b>													x	x										
2.1	Develop conservation approach and management objectives for the World Heritage boundaries.														x	x	x								
2.2	Develop management framework and plan of action for the DHR boundaries.														x	x	x								
2.3	Develop a disaster risk management plan and tourism management plan.														x	x	x								
2.4	Develop a draft CCMP for the DHR World Heritage													x	x	x	x	x	x	x					

	property.																								
2.5	Execution of a demonstration project													x	x	x	x	x	x	x	x				
2.6	<b>Third Review Meeting of the project team with IR</b>															x	x								
2.7	Develop a draft Comprehensive Conservation Management Handbook.																		x	x	x				
2.8	Final Review Meeting of the Project Team with IR																					x	x		
2.9	Preparation of Final Report by UNESCO																							x	x

Annex C<sup>8</sup>

## C1 Budget by UNESCO Budget Line (in USD)\*

Cost Elements Description	Year 1	Year 1	Year 2	Year 2	Total
	Month 0-6	Month 7-12	Month 13-18	Month 19-24	
<b>(10) Staff</b>					
(10') Travel costs	664	664	664	664	2,654
(11) International experts/Consultants	88,666	50,304	47,335	47,702	234,007
(13) Administrative and Technical support staff	14,061	14,062	14,062	14,062	56,247
<b>(10) Total Staff</b>	<b>103,391</b>	<b>65,030</b>	<b>62,061</b>	<b>62,428</b>	292,908
<b>(20) Subcontracts</b>	<b>63,000</b>	-	-	-	63,000
<b>(30) Training, seminars and meetings</b>	-	-	-	-	-
<b>(40) Equipment</b>	<b>85,914</b>	<b>6,514</b>	<b>7,092</b>	<b>6,514</b>	106,034
<b>(50) Miscellaneous</b>	<b>2,578</b>	<b>2,506</b>	<b>2,473</b>	<b>2,476</b>	10,033
<b>Subtotal – direct costs</b>	<b>254,882</b>	<b>74,050</b>	<b>71,625</b>	<b>71,417</b>	<b>471,975</b>
<b>(80) Support costs</b>	<b>33,135</b>	<b>9,626</b>	<b>9,311</b>	<b>9,284</b>	61,357
<b>TOTAL</b>	<b>288,017</b>	<b>83,676</b>	<b>80,936</b>	<b>80,702</b>	<b>533,331</b>

<sup>8</sup> Complete either a budget by UNESCO budget line (C1) or a budget by activity (C2). In case the budget per activity is the one approved by the donor, reporting will be provided per WBS elements. In any cases, a detailed budget labelled with UNESCO budget-lines, with cost recovery details, must be prepared as required by BFM, for internal management purposes.