ANNUAL REPORT (April 2022 to March 2023)

Wildlife Institute of India - Category 2 Centre (WII-C2C) for World Natural Heritage Management and Training for Asia and the Pacific Region, under the auspices of UNESCO Dehradun, India





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भारतीय वन्यजीव संस्थान Wildlife Institute of India

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# Background

On 2<sup>nd</sup> September 2015, an Agreement was signed between Government of India and UNESCO to establish in Dehradun a 'Centre for World Natural Heritage Management and Training for Asia and the Pacific Region' as a Category 2 Centre under the auspices of UNESCO. It was signed by the Director General of Forests, Ministry of Environment, Forest and Climate Change, Government of India as counterpart to the signature by the Director General, UNESCO, Paris. The Agreement was previously approved by the Government of India's Cabinet of Ministers, chaired by Hon'ble Prime Minister on 5<sup>th</sup> August, 2015. The Centre has accomplished Annual Work Programmes for the years 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21.

## **Mission and Objectives**

The Centre's mission is to strengthen implementation of the World Heritage Convention in Asia and the Pacific Region by building the capacity of all those professionals and bodies involved with Natural Heritage site inscription, protection, conservation and management in Asia and the Pacific region, through training, research, dissemination of information and network building. The overall objective is to focus on Natural Heritage conservation issues with the aim to:

♦ contribute to the strengthening of capacities in the management of Natural World Heritage in the region;

• contribute to achieving a more balanced representation of properties from Asia and the Pacific on the World Heritage List;

 raise awareness among the general public and the youth in particular of the importance of Natural World Heritage and the need to protect it; and

• foster international cooperation on Natural World Heritage initiatives.

# WII Governing Body Meeting [3-Nov-2022]

At the 71st Meeting of the Governing Body of WII held on 3<sup>rd</sup> November, 2022 at MoEFCC, New Delhi, the agenda of WII-C2C was considered. Director, WII informed that the C2C is a unique Centre and the only such Centre in the Asian region. The mandate of the C2C was stated and the need to resume the MSc Course was stated. The said course was discontinued during the Covid-19 period. Further, as C2C is of permanent nature, need of a budget allocation from Grant-in-Aid to WII and to run it as a permanent cell was deliberated.

The Governing Body approved the proposal for C2C:

(i) To resume the MSc Course in Heritage Conservation and Management from the next academic session, i.e., 2023-24.

(ii) The proposal of C2C to run as a regular cell of WII with allocation of budget under this head from MoEFCC.

# Activities Undertaken During 2022-23

A key objective of the Centre is to contribute towards enhancing representation of properties on the World Heritage List. Towards this end, the Centre offers technical support to State Parties in the process of nomination of World Heritage Sites.

The Operational Guidelines of the World Heritage Convention has elaborate provisions for nomination of properties on the World Heritage List. The first step is for a State Party to make an 'inventory' of its important natural and cultural heritage sites termed as Tentative List. Thereafter, the State Party may prepare an exhaustive nomination file for a site which is submitted to the World Heritage Centre for review and to check it is complete. Once a nomination file is complete, the World Heritage Centre sends it to the appropriate Advisory Bodies for evaluation. A nominated property is independently evaluated (both by review of the nomination file and by site visit) by two Advisory Bodies mandated by the World Heritage Convention: the International Council on Monuments and Sites (ICOMOS) for cultural sites and the International Union for Conservation of Nature (IUCN) for natural sites.

Once a site has been nominated and evaluated, the intergovernmental World Heritage Committee makes the final decision on its inscription. Once a year, the Committee meets to decide which sites will be inscribed on the World Heritage List. It can also defer its decision and request further information on sites from the States Parties. To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria (six cultural and four natural criteria). A full nomination cycle from Tentative List to final inscription may take a minimum of two-and-a-half years or more.

## 1) Nomination/Dossiers

a) Bhedaghat-Lametaghat in Narmada Valley nomination dossier preparation

As part of the project under the aegis of Madhya Pradesh Tourism Board, WII-C2C has initiated preparation of documentation on the nomination dossier of Bhedaghat-Lametaghat in Narmada Valley. Bhedaghat is a town situated in the Jabalpur district, and approximately 20 km from the Jabalpur city is famous for the Dhuadhar waterfall. It is one of the famous tourist destinations of Central India. The river Narmada drops down in a 30 m deep gorge of marble rocks, creating one of the most important and beautiful natural sites. These rocks rise to 100 meters above the river and are rich in magnesium limestone that reflects different colours in different lights. Its religious, aesthetic importance also has significant evidence of geological process ongoing in the river valley, specifically at the proposed nominated area. Unique geological characteristics make Bhedaghat-Lametaghat the only site where Marble, Phyllite, BIF, Quartzite of the Mahakoshal group of Proterozoic age rocks have been recorded together.Several dinosaur fossils also have been found in the Narmada valley, particularly in the Bhedaghat-Lametghat area of Jabalpur. Many unique features make the Bhedaghat-Lametaghat area outstanding in the world's context compared with other similar properties.

b) Examination of Nomination Dossiers of Natural Sites [May 2022]

As a part of India's membership to the World Heritage Committee, the WII-C2C through the Director Wildlife Institute of India as an expert (natural heritage) on India's delegation

undertook review and examination of Nomination Dossiers of Natural World Heritage Sites considered by the World Heritage Committee. Comments were provided on the dossiers for

1. Major boundary modification of the trans-national serial property of the Hyrcanian Forests of the Republic of Azerbaijan and Islamic Republic of Iran

2. Minor boundary modification of the trans-national serial property of the Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe

3. Major boundary modification of Ha Long Bay - Cat Ba Archipelago of Viet Nam

Remarks: All the dossiers were recommended for inscription.

c) Analysis of Majuli [Feb 2023]

Majuli River Island is a large land formation located in the mid-stream of the River Brahmaputra in Assam. This island was formed due to a dynamic fluvial geomorphological activity of the ongoing Eurasian-Indian collision in the late Holocene, and its geomorphology is constantly moulded by the plate tectonics and fluvial dynamics of the Brahmaputra system and their interaction. This site was proposed to be nominated as a World Heritage Site and the nomination dossier under criteria (viii) under the Natural Category. It was submitted to WII-C2C for assessment and comments by the Archaeological Survey of India (ASI). The dossier was found to be in compliance with the format of the Annexure 5 of Operational Guidelines of the World Heritage Convention. The assessment of the dossier was that the proposal may be considered with appropriate revisions, based on aspects of the boundaries of the site, the need to incorporate the nature-culture linkages along with the fragile character of the physical boundaries and the need for some clarity on the administrative framework of the site.

#### 2) Capacity Building Trainings and Workshops

The Centre's mandate to contribute to the strengthening of capacities in the conservation and management of World Natural Heritage is derived from the "World Heritage Capacity Building Strategy" which is based on the World Heritage Committee's focus on capacity building as one of its five strategic objectives (the 5Cs: credibility, conservation, communication, capacity building and community). The purpose of this strategy is to provide a framework which favours the development of effective actions and programmes to strengthen or develop capacities of practitioners, institutions, communities and networks for the conservation and management of World Heritage.

The World Heritage Capacity Building Strategy also foresees UNESCO Category 2 Centres in the regions working on World Heritage issues as appropriate institutions to take the lead in developing a regional capacity building strategy and associated programmes for strengthening capacities at the regional level. In alignment with this strategy, among the core functions of the Centre is to conduct short and long term capacity-building activities, including workshops, courses and international conferences.

a) Webinar on Climate Vulnerability Index for World Heritage Sites

On Friday, 20th May 2022, WII-C2C in collaboration with James Cook University organized a webinar on "Climate Vulnerability Index: Addressing Climate Change in World Heritage Sites". The Climate Vulnerability Index (CVI) developed at the James Cook University is a novel rapid assessment tool for impact of climate change on World Heritage. Successfully applied in natural and cultural World Heritage properties in a wide range of geographies from Nigeria to Norway, CVI's values-based, science-driven, and community-focused methods aim to identify and promote adaptive management of climate-related threats showing a new common way forward. The webinar was initiated by Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C who introduced the speaker who was here in person at WII-C2C, Ms Taruna Venkatachalam (Research Assistant for the CVI) of James Cook University (JCU), Australia and fellow panelists, Mr. Scott Heron (Associate Professor, JCU) & Dr. Jon Day, developers of the CVI who joined remotely from JCU Australia. In her presentation, Ms. Venkatachalam took the audience through the CVI stages from values assessment to community focus to the risk-matrix approach. She also clarified on the strengths and limitations of the CVI process mentioning refinements made as the CVI process was applied to a number of World Heritage sites – cultural, mixed, and natural over a period of time. When the floor was opened for audience questions, topics like policy impacts, applicability to non-World Heritage sites and elements of subjectivity in the CVI process were covered. About 35 participants joined in the webinar including attendees from Mexico and Australia.

b) Natural Heritage Site Managers Workshop

With the objective of information exchange, experience sharing, and cross-learning, a Natural World Heritage Site Managers' Meeting was organised by WII-C2C in Rishikesh, Uttarakhand on 4th-5th July, 2022. A total of 12 participants, including site managers and officials from 5 natural World Heritage Sites of India, viz. Great Himalayan National park Conservation Area, Keoladeo National Park, Khangchendzonga National Park, Nanda Devi National Park and Sundarbans National Park, attended the consultation. Primary discussions were held on the roles, responsibilities, and partnerships between the sites and WII-C2C. Sessions were conducted on the World Heritage system, India's members of the World Heritage Committee, updates on the Periodic Reporting exercise and State of Conservation reports. Valuable discussions were held on potential collaborations with the Forest Department of the natural World Heritage Sites of India.

c) Training Programme on Monitoring of OUV for Western Ghats – Talacauvery Sub-Cluster

WII-C2C organized a "Training Programme on Monitoring of Outstanding Universal Value of Natural World Heritage Sites: Western Ghats – Talacauvery Sub-Cluster" on 10th-11th October, 2022, at Madikeri, Karnataka. in cooperation with the Karnataka Forest Department. The purpose of this workshop was to build capacity and sensitize frontline staff of the World Heritage property about the Outstanding Universal Values of the site and assess its current status. The workshop held interactive discussions with forest frontline staff on the current status of OUVs of the heritage site and explored monitoring, planning and management strategies. The programme had sessions on the World Heritage Convention, Western Ghats Serial Sites, India's role in the World Heritage Committee, reporting obligations, OUV assessment and SWOT exercise. The OUV analysis revealed overall condition of criteria ix and x as stable and well conserved; the integrity of the sites is well maintained albeit facing some development and human population pressure; and the protection and management regime as being robust with active role of the Karnataka Forest Department. 28 forest frontline staff participated in the programme.

d) MPTB Nomination Dossier workshop, Jabalpur

As part of the nomination dossier preparation of Bhedaghat-Lametaghat in Narmada Valley, a stakeholder workshop was organized in Jabalpur, Madhya Pradesh. Key organisations including the Madhya Pradesh Tourism Board, Geological Survey of India, Archaeological Survey of India and other local authorities participated in the programme. The workshop highlighted the potential World Heritage values of the site, deliberated on the geological criteria in particular and further took the participants on a tour of the site. The objective was to bring the related agencies on the same platform towards the purpose of documentation of the nomination dossier.

e) Workshop on Natural Heritage and Geo-Informatics on International GIS Day

In celebration of GIS Day 2022, WII-C2C organized a "Workshop on Natural Heritage and Geoinformatics" in an annual event that has become a highlight of WII's calendar. Like past years, the number of registrations and participants in this event by researchers for researchers approached 100 with a broad span of discussions spaced through the day. The event opened with Dr. Gautam Talukdar, Faculty In-Charge exhorting the young participants to be at the leading edge of technologies like GIS and Remote Sensing and develop pathbreaking solutions. Mr. Niraj Kakati, Technical Officer, WII-C2C then guided the audience through some fundamental concepts of natural heritage and World Heritage as it is a combination of terms rarely understood together. This was followed by an enthralling discussion fuelled by a stage where Dr. Ruchi Badola (Registrar, WII), Dr. Gautam Talukdar, Dr. Salvador Lyngdoh of WII, and Dr. Hitendra S Padalia of IIRS Dehradun brought back memories of the first days of computerization and GIS in the Institute, while asking those

present to look forward to an AI and ML-heavy future. Dr. Badola's emphasis on the continuing importance of solid ground-truthing despite the latest technological advances underlined a fundamental tenet of good research. Dr. Hitendra Padalia, Head, Forestry and Ecology Department, IIRS then made a detailed presentation on the latest GIS developments for quantifying ecosystem services including Sun-Induced Chlorine Fluorescence. Mr. Debanjan Sarkar, PhD scholar, then showed the know-how and no-nos of making an aesthetic map choosing the Natural World Heritage Site of Kaziranga as his muse. Then it was the turn of Mr. Anuranjan Roy, WII-C2C, to take the audience on a journey to the origins of open-source and low-frills GIS. Mr. Dhruv Jain then proceeded to demonstrate the very important technique of Land Use, Land Use (LULC) classification in GIS. The day ended with Ms. Sneha Pandey demonstrated the power of the Google Earth Engine tool through a sample NDVI calculation with the participants and presenters looking forward to Day 2.

f) Training Programme on Monitoring of OUV for Khangchendzonga National Park, Sikkim

WII-C2C organized a "Training Programme on Monitoring of Outstanding Universal Value of Natural World Heritage Sites: Khangchendzonga National Park" on 21st - 22nd November 2022, at Yuksom, Sikkim, in cooperation with the Sikkim Forest Department. The purpose of this workshop was to build capacity and sensitize frontline staff, communities, and other stakeholders living around the World Heritage property about the Outstanding Universal Values of the site and assess its current status. The workshop held an interactive discussion with forest frontline staff and other stakeholders on the current status of OUVs of the heritage site and explored monitoring, planning and management strategies. As per the respondents, the natural beauty remains unspoiled. It was reported that the OUVs (in terms of habitat, species and diversity) were essentially intact. Authenticity and integrity of the site is well maintained. The park enjoys strong legal protection along with its sacred values. Nearly 67 participants included forest frontline staff and local community representatives like Himal Rakshaks and Eco-Development Committee members.

g) "Strengthening Bonds, Building Resilience" International Heritage Symposium on Nature-Culture Linkages and Eco-Disaster Risk Reduction

In keeping with the dynamic concept of heritage with a special ability to connect culture to nature and people to their identities, the Wildlife Institute of India Category 2 Centre (WII-C2C) for Natural Heritage Management is hosting the "Strengthening Bonds, Building Resilience" symposium from 8th-10th December, 2022. A series of sessions brought together leading experts and venerated speakers who provided clarity on enhancing natureculture connections and how they can contribute to solutions for reduced disaster risks. Day 1 had Dr. Shikha Jain, Director, DRONAH as Keynote Speaker who expressed her concern on the weakened relationship between man and nature while also bringing up the potential future where such bonds may be restored. Post lunch, there was a Jim Corbett movie screening and related discussion by Ms. Anjali Bharthari. Dr. Shirish Ravan, Visiting Professor, University of Central Lancashire, UK gave a talk on the strong promise of "Eco-DRR through Robust Ecosystems". The day ended with a broad masterly talk on "Human Naturescapes & Indigenous Knowledge Systems" by Dr. Erach Bharucha drawing on his long decades of experience in conservation and community work. Day 2 began with a panel discussion on the symposium theme of "Strengthening Bonds, Building Resilience" by panelists Dr. Shikha Jain and Dr. Shirish Ravan who commented on the role of culture in

climate change mitigation and the changed perspectives of leaders and senior administration who now include nature-based solutions. Post lunch, talks were given by visiting delegates from the Phillippines, Dr. Eric Zerrudo, Director, University of Santo Tomas (Philippines) and Rev. Fr. Jonas Awayan, Director of the Cultural Heritage Commission and the Archivist on the Archdiocese of Cagayan de Oro (Philippines) with Dr. Neel Kamal Chapagain, Professor / Director at Centre for Heritage Management, Ahmedabad University adding heritage education perspective. Dr. Ruchi Badola, Registrar, WII took the audience on a spectacular journey on one of the foundational rivers of our country, the Ganga while Dr. Y. V. Jhala, Dean, WII spoke on "Reintroduction as a Tool for Restoring Natural Heritage" drawing on examples embedded in our own history, the wolves of Yellowstone concluding with the cheetah re-introduction project and its powerful vision. Day 3 of the symposium included a visit for the delegates to the beautiful forests of Rajaji National Park in a safari through the Mohand gate. The visitors experienced the wonders of a verdant forest landscape and its inseparable human components through stops at past settlements, ably guided by the Forest Department staff.

h) Making Regional Heritage Global: Focus on the Future, Sundarbans National Park

From the 17th-20th of January, 2023, the Wildlife Institute of India – Category 2 Centre (WII-C2C) on World Natural Heritage Management and Training for Asia and the Pacific Region, under the auspices of UNESCO organized a 2-day meeting "World Heritage: Making Regional Heritage Global - Focus on the Future" at the World Heritage Site of Sundarbans National Park in West Bengal, India in association with the West Bengal Forest Department. The meeting was attended by senior administrative and Forest Department representatives of the states of Himachal Pradesh, Uttarakhand, Sikkim, Madhya Pradesh, West Bengal, and Karnataka. Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C; Dr. Bhumesh Singh Bhadouria, Technical Officer, WII-C2C; and Sh. Niraj Kakati, Technical Officer, WII-C2C presented to the attendees on the World Heritage Convention, the role & experience of WII-C2C and its capabilities before opening the meeting to comments and clarifications sought by the attendees. The attendees further deliberated on strategies for developing and promoting the Convention Concerning The Protection Of The World Cultural and Natural Heritage (commonly known as the World Heritage Convention) with a particular focus on possible collaborations with respect to Natural and Mixed World Heritage Sites. The advantages of being listed as a World Heritage Site and the prospective challenges of the same were discussed in detail with multiple ways forward which were documented as part of the outcomes.

i) Conference on Current Research and Management Interventions in Natural and Mixed World Heritage Sites of the Asia and Pacific Region

Natural and Mixed heritage sites in India have been facing many challenges in recent years due to extreme pressure exerted on natural ecosystems. These pressures are a consequence of the high density of the population, risk of catastrophic disasters, constant economic growth, and persistent poverty. World Heritage properties are exposed to Natural (flood, drought, earthquake, and Tsunami) and manmade (forest fires, arm conflicts, industrial accidents, mass refugee movements), threatening the integrity and may compromise natural values. Therefore, it is necessary to understand the current status and ongoing management interventions of WHSS in Asia and Pacific region. This conference brought together knowledge and experience of site managers, researchers, educational institutes, NGOS and various other stakeholders associated with the heritage site management and conservation of Natural and Mixed World Heritage Sites in the Asia and Pacific region. In addition, this workshop was also attended by eminent national experts and agencies to discuss, deliberate strategies to be adopted for the long-term conservation of World Heritage Sites in the Asia and Pacific Region. Presentations were made on OUVs-Flora, Fauna and Threats; Change and Disaster Risk Reduction; Local Communities & Heritage and WHS Management Practices. The outcomes of the conference were of relevance for the scientists, policy makers, NGOS to develop appropriate strategies to improve management of WHSs and ensure ecosystem services.

j) Classroom Sessions

WII-C2C conducted a number of lecture sessions for IFS officers of WII Diploma Course on Advanced Wildlife Management and Compulsory Training Course as well as for students of MSc Course in Wildlife Science on various World Heritage-related themes. These sessions covered subjects of Natural Heritage Conservation including details about the World Heritage Convention, Heritage Tourism, Ecosystem Services, synergies with other biodiversity-related Conventions.

- Session on 'Natural Heritage Conservation' (Module Principles and Practices of Wildlife and Protected Area Management) for IFS Officers of WII PG Diploma Course in Advanced Wildlife Management (7 Apr 2022)
- Session on 'Heritage Tourism' (Module Visitor Use Management and Interpretive Planning) for IFS Officers of 43rd WII PG Diploma Course in Advanced Wildlife Management (5 May 2022)
- Session on 'Valuation of Carbon Ecosystem Services (Coastal and Terrestrial)' (Module Ecosystem Services) for IFS Officers of WII PG Diploma Course in Advanced Wildlife Management (24 May 2022)

The InVEST Ecosystem Services model was demonstrated to Diploma trainees. Though the model can map many ecosystem services but carbon storage and sequestration submodel was explained to the trainees. Two sites of Andaman Island and Askot Landscape in Western Himalayas of Uttarakhand.of were taken for demonstration, one was the

- iv) Session on 'World Heritage and other Biodiversity-related Conventions' and on 'World Heritage Management' for MSc in Wildlife Science Course (03-04 Nov 2022)
- v) Session on World Heritage Convention and Synergies with International Conventions for IFS Officers of Compulsory Training Workshop on 'International conventions and their synergies with respect to climate change, forestry, wildlife and biodiversity conservation' (8 Dec 2022)
- vi) Session on 'Natural Heritage Conservation' (Module Principles and Practices of Wildlife and Protected Area Management) for IFS Officers of 43rdWII PG Diploma Course in Advanced Wildlife Management (2 Mar 2023)
- vii) Session on 'Heritage Tourism' (Module Visitor Use Management and Interpretive Planning) for IFS Officers of 43rd WII PG Diploma Course in Advanced Wildlife Management

#### 3) Advisory Services

The Centre offers advisory services and technical inputs on World Natural Heritage issues, including for conservation and management of World Heritage Sites, State of Conservation reports, State Party interventions at World Heritage Centre sessions among others to Central and State Governments of India, other countries on request, UNESCO Advisory Bodies and other relevant institutions.

a) World Heritage Committee Working Group Meetings (2022-23)

As a part of India's membership to the World Heritage Committee, the WII-C2C through the Director Wildlife Institute of India as an expert (natural heritage) on India's delegation participated in the series of meetings of various thematic Working Groups of State Parties to the World Heritage Convention.

- Meeting of the Open-ended working group of States Parties to the World Heritage Convention in conformity with Decision 44 COM 8 (5-10 May 2022): The meetings involved deliberations on 'Guiding Principles for the Preparation of Nominations Concerning Sites associated with Recent Conflicts'.
- ii) Meeting of the Open-ended working group of States Parties to the World Heritage Convention concerning World Heritage and Climate Change (22 March / 16 September / 23 November / 31 January 2023 / 21 March 2023): The meetings involved detailed discussions on the 'Updated Policy document on Climate Action for World Heritage', outlining recommendation for implementation by States Parties. The document is scheduled to be submitted for the next session of the World Heritage Committee in 2023.
- b) World Heritage Advisory Bodies Networking Activity (11, 13, 18, 20 May 2022)

WII-C2C took part in the capacity-building activity for professionals within the network of Advisory Bodies to the World Heritage Convention. The focus was on the two upcoming revised guidance and tools - the *Guidance and Tools on Impact Assessment in a World Heritage* Context and the *Enhancing Our Heritage Toolkit 2.0.* It offered an overview of what has been revised, what is new and how they can be used in providing advice in key processes of the Convention, including Nominations and State of Conservation.

c) Feedback from National Focal Point - Final Framework Action Plan of the 3rd Cycle of Periodic Reporting for Asia-Pacific region (Aug 2022)

As part of the Periodic Reporting 3<sup>rd</sup> Cycle for the Asia-Pacific Region, WII-C2C had coordinated the exercise for natural/mixed World Heritage Sites of India during the previous year. Subsequently, the Centre has been engaged in providing inputs for the Regional Action Plan in association with the World Heritage Centre and other related agencies. Comments and suggestions were provided as well for the Final Framework Action Plan which is scheduled to be submitted for the next session of the World Heritage Committee in 2023.

d) World Heritage Leadership Forum – Future of Capacity Building for our shared World Heritage, Norway (21-23 Sep 2022)

A high-level World Heritage Leadership Forum reviewed the results produced by the World Heritage Leadership (WHL) Programme in its first six-years, from 2016 to 2022. WII-C2C was represented by Faculty In-Charge, Dr. Gautam Talukdar. The leaders also deliberated on how these results could have wider applications in different contexts. The aim of the WHL programme is to strengthen the capacity of heritage professionals of the next generation, looking beyond the 50th anniversary of the World Heritage Convention (1972-2022). The results of the forum included a complete review of what was achieved thus far, building on the achievements of the Programme. A plan to further strengthen capacity building through an ambitious new phase of the WHL was also documented.

e) State of Conservation Reports – Manas Wildlife Sanctuary, Keoladeo National Park (Oct 2022)

In the context of Decisions of the 44th Session of the World Heritage Committee 2021, the state of conservation of Manas Wildlife Sanctuary and Keoladeo National Park were examined. WII-C2C, through meetings and consultations, facilitated the preparation and subsequent submission of the State of Conservation Reports of the two natural heritage properties of India for consideration at the 46th Session of the Committee.

f) Evaluation of State of Conservation Reports of Natural World Heritage Sites (Nov 2022)

As a part of India's membership to the World Heritage Committee, the WII-C2C through the Director Wildlife Institute of India as an expert (natural heritage) on India's delegation undertook review and evaluation of State of Conservation Reports of Natural World Heritage Sites considered by the World Heritage Committee. The reports of the following sites were evaluated:

- 1. The Sundarbans Bangladesh
- 2. Tropical Rainforests of Sumatra Indonesia
- 3. Lorentz National Park Indonesia
- 4. Komodo National Park Indonesia
- 5. Landscapes of Dauria Mongolia and Russian Federation
- 6. Great Barrier Reef Australia
- 7. Dong Phayayen Khao Yai Forest Complex Thailand
- 8. Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe

- Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, France, Germany, Italy, North Macedonia, Poland, Romania, Slovakia, Slovenia, Spain, Switzerland, Ukraine

- 9. Białowieża Forest Belarus and Poland
- 10. The Islands and Protected Areas of the Gulf of California Mexico
- 11. iSimangaliso Wetland Park South Africa
- 12. Volcanoes of Kamchatka Russian Federation
- 13. Lake Baikal Russian Federation
- 14. Western Caucasus Russian Federation
- 15. Natural System of Wrangel Island Reserve Russian Federation
- 16. Lake Turkana National Parks Kenya
- 17. Río Plátano Biosphere Reserve Honduras

- 18. Selous Game Reserve United Republic of Tanzania
- 19. Socotra Archipelago Yemen
- 20. Mosi-oa-Tunya/ Victoria Falls Zambia and Zimbabwe

Remarks: Most of the SoC reports were found to be satisfactory.

g) IUCN Reactive Monitoring Mission – Keoladeo National Park (Feb 2023)

At its 42nd session in Manama, Bahrain (June/July 2018), the World Heritage Committee requested the State Party of India to invite an IUCN Reactive Monitoring mission to Keoladeo National Park World Heritage property "to assess its state of conservation and progress made in addressing issues of water provision and invasive species" (Decision 42 COM 7B.68). Following delays to the Mission due to the pandemic, the Mission could finally visit the property from 14th-17th February, 2023 represented by experts Mr. Philip McGowan (UK) and Mr. Chimed-Ochir Bazarsad (Mongolia). WII-C2C facilitated the Mission in India with Dr. Bhumesh Singh Bhadouria, Technical Officer, WII-C2C designated as nodal person. The tour programme included necessary field visits to key locations related to the site; meetings with the Indian authorities at the national, regional and local levels; consultations with a range of relevant stakeholders, including representatives of the management authority, nongovernmental organisations (NGOs), and relevant scientists and experts. In the process, WII-C2C also provided technical support to the Rajasthan Forest Department and Keloadeo National Park authorities in engaging with the mission. The IUCN Mission will now prepare and submit their report for consideration at the next Session of the World Heritage Committee in 2023.

#### 4) Outreach

A basic objective of the Centre is to raise awareness among the general public and youth in particular, of the importance of natural World Heritage and the need to protect it. This includes development of outreach and communication tools to explain the key concepts and processes of the World Heritage Convention and ensuring all stakeholders are able to make the most effective use of the Convention to support world heritage conservation. The World Heritage Committee also encourages raising awareness of the need to preserve World Heritage and supports the development of educational materials, activities and programmes towards this end.

#### a) World Heritage Day (18 Apr 2022)

WII-C2C organized the celebration of World Heritage Day 2022 on 18th April 2022. The day began with a series of activities for local schoolchildren with more than 100 students of Raja Rammohan Roy Academy, Graphic Era Global School, St. Paul's and 2St. Mary's schools ably supported by teachers assigned by the respective schools to accompany the children. The welcome note by Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C introducing the young audience to the concept of World Heritage Day & this year's theme "Heritage and Climate". Dr. Ruchi Badola, Dean & Registrar, WII encouraging the students to share their understanding of heritage and develop it further through an interactive speech in which the student audience provided very insightful answers.

The students also enthusiastically participated in the Art Competition based on themes of "Our Natural Heritage" and "Threats Associated With Natural Heritage" submitting creative artwork which amply conveyed the same. This was followed by a trivia quiz competition "World Heritage Around The World" centred on World Heritage Sites where the participants (a team of 5 representing each of the 4 schools) and an engaged audience tried answering questions embedded with clues on World Heritage Sites from the Arctic Circle to Peru.

The evening saw a cultural evening celebrating World Heritage Day where performers drawn from researchers, staff and staff family members put up a memorable show. Ms. Ditsha Talukdar initiated the proceedings with her rendering of the Ganesh Vandana while the National Mission for Clean Ganga (NMCG) team put up a creative choreography of the Namami Gange theme song. The Graphic Era Global School's choir gave the gathered audience a powerful display of singing, followed by a series of traditional dances put together by school students and staff children including Rajasthani, Nepali, Assamese, and a medley of folk dances.

After a performance of "Buyra Luit Buwa Kivo", a song much venerated in Assamese culture; a live guitar medley of folk songs including John Denver and an impromptu Hindustani classical vocal performance of Shiv Vandana, it was time for a final series of group dances by Uttaranchal College and NMCG – Punjabi, Garhwali. To the beats of the unifying "Desh Rangeela" song with the active support of the audience closed the World Heritage Day programme on a shared note as indeed heritage is supposed to be.

b) International Day for Biological Diversity (22 May 2022)

#### i) Online Natural Heritage Quiz

Natural and Mixed World Heritage Sites (WHS) on the World Heritage List represent the pinnacle of Nature's creativity and are a true representation of our planet's wealth of biodiversity. In the Asia Pacific region alone, there are 23 countries blessed with 70 natural and 12 mixed WHS but these riches even though formally recognized are not widely known among the larger populace. Keeping this in mind, on International Biodiversity Day of 22nd May 2022 (IBD 2022), WII-C2C took curious participants through a tantalizing trivia quiz on natural/mixed WHS from the Asia Pacific in the natural heritage quiz "At Home with Nature: Learning Biodiversity from the Biodiverse". The questions covered a broad spectrum of flora and fauna from all countries in the Asia Pacific with a natural/mixed site. An innovatively designed Google Form was put up online for all to access multiple-choice questions put forward from the perspective of the iconic flora and fauna of these WHS themselves. It was a fun challenge for all ages as characters that grow, walk, fly, and swim these landscapes. The quiz was featured on UNESCO's Home Page on World Heritage Day and about 450 participants complete the quiz with participants from across 8 countries including Egypt, Guatemala and the Philippines.

ii) Awareness programme for students – NIEPVD, Bajaj Institute of Learning & Vocational Training for Deaf Children, College of Education, UCBMSH, Dehradun

On International Day for Biological Diversity 2022, the Wildlife Institute of India -Category 2 Centre facilitated an inclusive and equal opportunity campus walk for a mixed group of students and interested visitors in WII. It was a celebration of diversity of learning while exploring the importance of biodiversity. Students from the National Institute for the Empowerment of Persons with Visual Disabilities (Divyangjan) and the Bajaj Institute of Learning & Vocational Training for Deaf Children, both Dehradun based, represented the eager school student community who through their sign language interpretation and movement assistance revelled in the introduction to campus biodiversity led by Dr. Gautam Talukdar, Scientist – E and Faculty In-Charge, WII-C2C and Dr. R. Suresh Kumar, Scientist - E. Accompanying the students were a small group of visitors representing the Been There Doon That (BTDT) community which has been pioneering heritage walks in the Doon Valley region. The total group size was 45. The visitors got to sample the texture, smells, sounds and associated ecological stories of leaves, bark and birds among others. The group explored the WII trail pausing at various habitats and features like termite mounds and the pond to understand the intricate working of ecosystems which are often not discussed enough. As interviews for the Divyangan radio station and an impromptu quiz of the students revealed, every bit of information shared was absorbed with deep interest and the cause of protecting biodiversity significantly strengthened through communication in new and old channels.

c) National Institute for the Empowerment of the Persons with Visual Disabilities (Divyangjan) NIEPVD radio show for 91.2 NIVH Hello Doon (3 Jun 2022)

In observance of World Environment Day, WII-C2C participated in a panel discussion for a radio programme discussing the importance of environment conservation. The radio station 91.2 NIVH Hello Doon recorded the conversation which was further edited and broadcast to

the visually challenged listeners who tuned in to listen and learn. The panel consisted of Dr. Gautam Talukdar, Scientist – E and Faculty In-Charge, WII-C2C; Dr. R. Suresh Kumar, Scientist – E and Anuranjan Roy, World Heritage Assistant, WII-C2C and hosted by RJ Hema. The questions addressed including the history of World Environment Day, how to incorporate environmental consciousness in our daily lifestyle, on a wide range of topics from climate change and the impact of globalization on the environment to the impacts of an AC-dependent lifestyle that has currently developed in many countries.

d) World Environment Day – Awareness – Devalsari (5 Jun 2022)

As part of a nationwide celebration of World Environment Day by various WII projects at a number of locations, a team from WII-C2C co-hosted a programme for a group of 100 participants at Devalsari, a site of great natural and cultural significance with dense deodar forests and a venerated Shiva temple amidst it. The Dehradun based walking group Been There Doon That (BTDT) had invited a selected group of walkers to the location. As they walked Devalsari's beautiful trails, they learnt from the talks given on the trail by Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C and Dr. Lokesh Ohri, CEO & Founder, BTDT. The year's theme of "Only One Earth" featured as a significant part of the conversation as well.

e) Publication – Monitoring OUV: An analysis of the status of Natural World Heritage Sites in India

The United Nations Educational, Scientific and Cultural Organization (UNESCO's) World Heritage Convention, adopted in 1972, encourages identification and conservation unique and invaluable sites of global significance. These sites are recognized by their Outstanding Universal Value (OUV). This article takes up a detailed qualitative analysis on the status, trend and challenges of keeping intact the key OUV of five natural WHSs of India using a questionnaire survey, and respondents were forest frontline staff and community representatives. The Statement of OUV of each site was broken into more understandable components, and the important issues affecting these components were then assessed for their current condition and trend. Subsequently, strengths, weaknesses, opportunities and threats (SWOT) analysis was also carried out for each of the studied WHSs. The attributes of three out of five study sites are stable with a strong law and enforcement regime; they also have some concerns regarding limited manpower, anthropogenic disturbance, and public engagement opportunities. For the remaining two sites, the current threats are a matter of concern and require continued and enhanced management strategies. It was recommended that the site-specific detailed management requirements of OUV need fine-tuning in the sites' existing management plans. Finally, the outcome of the present assessment was compared with the IUCN World Heritage Outlook Report 2020.

 f) Panel participant in webinar, 'The Directions of Heritage Interpretation in World Heritage Policy' organised by International Centre for the Interpretation and Presentation of World Heritage Sites under the auspices of UNESCO (WHIPIC), Republic of Korea (10 Nov 2022)

WII-C2C was a panel participant in a webinar on heritage interpretation at World Heritage Sites providing future pathways for WH Interpretation particularly in context of natural heritage. Since interpretation is key to making visitors care for heritage and take back lifelong memories, it was suggested that it may need to be explicitly mentioned and explained in documents like the WH Convention and Operational Guidelines as the will to save is strongly linked to an emotional connection with the place. WII-C2C was represented by Dr. Gautam Talukdar, Faculty In-Charge where he brought forward some unique requirements of natural heritage interpretation and what should be prioritized in future heritage interpretation and presentation policies.

# Collaborations

WII-C2C is collaborating with a range of sub-national, national, and international institutions and organizations:

- Himachal Pradesh Forest Department
- Uttarakhand Forest Department
- Sikkim Forest Department
- Madhya Pradesh Forest Department
- West Bengal Forest Department
- Karnataka Forest Department
- Madhya Pradesh Tourism Board, Bhopal
- Centre for Heritage Management, Ahmedabad University
- Been There Doon That (BTDT), Dehradun
- National Institute for the Empowerment of the Persons with Visual Disabilities (Divyangjan)
- University of Santo Tomas, Manila, Philippines
- James Cook University, Australia
- International Centre for the Interpretation and Presentation of World Heritage Sites under the auspices of UNESCO (WHIPIC), Republic of Korea
- World Heritage Leadership (WHL) Programme
- IUCN
- ICCROM
- World Heritage Centre, Paris

# SELECT PHOTOGRAPHS





