

ANNUAL REPORT

(April 2021 to March 2022)

**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**



**भारतीय वन्यजीव संस्थान
Wildlife Institute of India**

CONTENTS

<i>Background</i> -----	4
<i>Mission and Objectives</i> -----	4

Activities undertaken during 2021-22

1. Nominations/Dossiers -----	5-7
1.A. Natural Sites from MP included in India's Tentative Lists -----	5
1.B. Consultation Meetings on Gangotri National Park and Kailash Landscape Tentative List Documentation -----	6
1.C. Garo Hills Nomination Dossier -----	7
1.D. Meghalaya Biosphere Reserve Documentation -----	7
2. Capacity Building Training and Workshops -----	8-12
2.A. Workshop I – “Skill Development for Tour Guides in Great Himalayan National Park Conservation Area, Himachal Pradesh” -----	8
2.B. IUCN World Conservation Congress Webinar -----	9
2.C. Forest Governance vis-a-vis interface of Laws related to Forest, Wildlife and Biodiversity -----	9
2.D. Workshop on “Safeguarding Natural Heritage through Education, Awareness and Network Building among Teachers and Students” -----	10
2.E. Workshop II - "Skill Development Programme for Naturalist/Tour Guides of Great Himalayan National Park Conservation Area" -----	10
2.F. One-Week Online training workshop on Management Effectiveness Evaluation (MEE) of Protected Areas and World Heritage Sites -----	10
2.G. Webinar on “Bastions of Conservation: Natural Heritage in the Asia Pacific” -----	11
2.H. Geography Week / GIS Day -----	11
2.I. Webinar on “Mangroves of Plenty: Ecosystem Services in World Heritage Sites -----	11
2.J. Webinar on "Mountains and World Heritage: Fountainheads of Life" -----	12
2.K. Webinar on “Tourism and World Heritage – Maximizing Benefits, Boosting Nature” -----	12

3.	Advisory Services-----	13-14
3.A.	Periodic Reporting - Submission of State Party India Questionnaires -----	13
3.B.	ASI Meeting on India's Nomination to the World Heritage Committee -----	13
3.C.	MEA and WII Meeting on World Heritage Capacity Building -----	14
3.D.	Periodic Reporting - Framework Action Plan Meeting -----	14
3.E.	World Heritage Committee Working Group Meetings -----	14
4.	Outreach-----	15-16
4.A.	World Heritage Day 2021 Celebrations -----	15
4.B.	IUCN ICCROM Heritage Place Lab -----	16
4.C.	World Heritage Cities Dialogues 2021-----	16
4.D.	World Heritage City Labs Webinars -----	16
5.	Research & Monitoring-----	17-18
5.A.	Study on mangrove ecosystem services in coastal hazard mitigation and climate change adaptation in Andaman Island, India-----	17
5.B.	Long-term Monitoring of Outstanding Universal Values (OUV) of Great Himalayan National Park Conservation Area-----	17
5.C.	Information Document on Natural/Mixed World Heritage Sites in the Asia and Pacific Region -----	18
6.	Master's Degree Course in Heritage Conservation and Management (2019-2021) -----	18-19
7.	Collaborations-----	19-20

Background

The Agreement between Government of India and UNESCO for the establishment in Dehradun of 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 was formally signed on 02 September, 2015 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 signing followed the approval of this Agreement by the Government of India's Cabinet of Ministers, chaired by Hon'ble Prime Minister, Mr. Narendra Modi on 05 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. The Annual Work Plan with budget outlay (2021-22) of the Centre was approved at the 36th Meeting of the Finance Committee of WII held on 25th March 2021. This Annual Report outlines the activities undertaken by the Centre during the year 2021-22.

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.

Activities undertaken in 2021-2022

1. Nominations/Dossiers

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.A. Natural Sites from Madhya Pradesh included in India's Tentative Lists (April 2021)

In April 2021, two natural sites of Madhya Pradesh (MP), India – Bhedaghat - Lametaghat in Narmada Valley and Satpura Tiger Reserve - were added to India's Tentative List for World Heritage. WII-C2C provided technical support for preparation of the Annex-2A documents for both these sites, which summarizes the suitability of sites for placement on the Tentative List, as the output of an ongoing project with the Madhya Pradesh Tourism Board. WII-C2C team had earlier surveyed the above-mentioned sites amongst others for their suitability as World Heritage Sites and found these two the most eligible. Bhedaghat, often referred to as the Grand Canyon of

India, where the Narmada winds her way through marble cliffs is a place of exceptional natural beauty and the dinosaur fossils with records of geological significance have been found preserved in Lametaghat making the site suitable as per OUV criteria (vii) [Exceptional natural beauty] and (viii) [Ongoing geological processes] respectively. Satpura Tiger Reserve, as one of the oldest forest reserves in a spectacular setting of the Satpura range where Himalayan and Western Ghats biodiversity intersect is a robust candidate on criteria (vii) [Exceptional natural beauty], (ix) [Ongoing ecological processes] and (x) [In-situ biodiversity conservation].

A first draft of the nomination dossier, as per the nomination format viz. Annex 5 of the Operational Guidelines for the Implementation of the World Heritage Convention, for inscription of Garo Hills Conservation Area, Meghalaya as a World Heritage Site was submitted to the Government of Meghalaya in October, 2020 for review and further finalisation. This was followed by a high-level meeting with the Hon'ble Minister and senior officials of the Department of Environment and Forest, Government of Meghalaya in January, 2021 to share the status of the nominations dossier and acquire necessary feedback. Currently, work is in progress to update the document for final submission.

1.B. Consultation Meetings on Gangotri National Park and Kailash Landscape Tentative List Documentation (24th August 2021)

A "Consultation Meeting on Gangotri-Gaumukh Landscape and Adi Kailash - Askot Sacred Landscape proposals for inclusion in the Tentative List of World Heritage Sites in India" was organized by WII-C2C on August 24, 2021, at the Wildlife Institute of India. The meeting was chaired by Director, Wildlife Institute of India. Dr. Dhananjai Mohan, Director, WII & WII-C2C offered the opening remarks while Dr. Gautam Talukdar, Scientist & Faculty in-charge, WII-C2C, presented an overview of the WII-C2C briefing the participants about the background of the Centre, its mandate and the activities undertaken in India and the Asia-Pacific region. Post a presentation by Mr. Niraj Kakati, Technical Officer, WII-C2C about the World Heritage Convention, an interactive discussion was held among the participants about the potential of these two sites as World Heritage Sites and key recommendations to bolster the proposals were reached. The attendees included Ms. Neha Verma, Additional Secretary, Environment and Forests, Government of Uttarakhand; Dr. Rajiv Bhartari, PCCF & HOFF, Uttarakhand State Forest Department; Dr. R.K.Patel, Superintending Archaeologist, Archaeological Survey of India, Dehradun Circle; Ms. Poonam Chand, Additional Director, Uttarakhand

Tourism Development Board; Dr. Santosh K Rai, Scientist-E, Wadia Institute of Himalayan Geology; Mr. A.K.Negi, Deputy Inspector General, ITBP.

1.C. Garo Hills Nomination Dossier (September 2021)

The Garo Hills Conservation Area (GHCA) in Meghalaya is a vivid example of natural richness supported by long held sustainable cultural practices. Consisting of 272.66 sq.km of forests including Balpakram National Park, Nokrek National Park and Siju Wildlife Sanctuary. It is one of the most diverse and thriving natural habitats with a mix of tropical forests supporting many endemic and endangered species with the traditional animistic belief system of the resident Garos, otherwise known as the Songsariks, encouraging the protection of the entire forest ecosystem. WII-C2C has been engaged in the preparation of its nomination dossier since 2018 and the results of the surveys & discussions have been now combined into the final draft version of the Garo Hills Nomination Dossier. The richly illustrated ~160-page dossier is a compendium of stunning images and detailed information on the natural and cultural diversity of the landscape with the justifications needed to nominate it under criteria (vi) [tangibly associated with living traditions] and (x) [conservation of in-situ biodiversity] of the World Heritage Convention as a Mixed World Heritage Site. The document is under review by the Meghalaya Forest Department.

1.D. Meghalaya Biosphere Reserve Documentation (July - September 2021)

As per the agreement between WII-C2C and the Govt of Meghalaya for the preparation of a proposal for inscription of Balpakram National Park and Narpuh-Saipung Reserved Forest as Biosphere Reserve under UNESCO's Man and Biosphere Programme, consultation meetings were held between WII-C2C & the major stakeholders in Meghalaya including Forest Department, local representatives, and academia from 13th – 22nd September 2021. The team visited Narpuh Wildlife Sanctuary in East Jaintia Hills District and Balpakram National Park in South Garo Hills District. Ms. Chakraborty established contact between the relevant stakeholders and the two project associates, whose work will be to gather ground level information on the biological, geographical and social aspects of the said areas, and help fill in the nomination form for proposing the two areas to be inscribed as UNESCO Biosphere Reserves. The team established contact with the relevant stakeholders

from the Forest Department to gather suggestions and some preliminary data on the sites and also help in planning of the field work. Narpuh has very dense and relatively untouched semi-evergreen and evergreen forest left in Meghalaya. The team, trekked inside the forest to witness the landscape and species. In Balpakram, the team witnessed the limestone rich deposits, the Mahadeo gorge, the Chitmag peak, the curious rock formations, fabled as the 'resting grounds of the spirits'. Compilation and consolidation of data for draft documentation of the proposed Biosphere Reserves are underway.

2. Capacity Building Training 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.

2.A. Skill Development Workshop-I for Tour Guides in Great Himalayan National Park Conservation Area, Himachal Pradesh (22nd - 25th July 2021)

The WII-C2C organized a "Skill Development Programme for Naturalist/Tour Guides of Great Himalayan National Park Conservation Area" on 22nd-25th July 2021. The venue was the Park's Sairopa Office in Kullu (HP), where a series of technical sessions by Wildlife Institute of India faculty, WII-C2C personnel and resource persons from Indian Institute of Tourism & Travel Management, Gwalior led the participants through the role and requirements of a naturalist/tour guide. Tourist guides are often a visitor's immediate points of contact in a place and play an important role in disseminating authentic information leaving lifelong impressions and

influencing travelers' behaviour and opinions of a destination. To be able to play their role fully, guides working in the World Heritage Site of GHNPCA need to understand the unique values of this natural heritage site, as well as to learn methods to conduct guided tours in a professional manner in keeping with international standards. These workshops enhanced their capability to provide tourists the experience they seek from their visit at the GHNPCA. 30 participants including tour guides, local homestay owners, officials from Himachal Pradesh Forest Department benefited from the workshop.

2.B. IUCN World Conservation Congress Webinar (5th September 2021)

On 5th September, 2021, as part of the IUCN World Conservation Congress being held in Marseille, WII-C2C co-hosted a Thematic Streaming Session with University of Tsukuba titled "Linking Nature and Culture in Asia and the Pacific: Initiatives for Advancing Knowledge and Scaling-up Capacity Building in Landscape Conservation". The session offered an opportunity for heritage practitioners to learn from and contribute to two different initiatives on linking nature and culture in Asia and the Pacific both aimed at improving the conservation and management of landscapes at national, local and site levels. Recognizing the need to bridge the divide between nature and culture for the effective management of landscapes, conserving biodiversity and safeguarding cultural diversity, in this session two interdisciplinary initiatives in Asia and the Pacific were shared. The UNESCO Chair on Nature-Culture Linkages in Heritage Conservation at the University of Tsukuba, Japan, and the WII Category 2 Centre on Natural Heritage Management and Training for Asia and the Pacific Region at the Wildlife Institute of India, presented two international projects, one on capacity building and the other on case-studies, which showcased how heritage practitioners from both sectors have been collaborating and sharing knowledge in landscape conservation. A brief presentation was followed by a panel discussion on key challenges with a view to engage the general audience into developing next steps within and beyond the Asia and the Pacific region. Mr. Anuranjan Roy presented on behalf of WII-C2C on "Nature and Culture - Clarifying Connections". Dr. Dhananjai Mohan, Director, WII & WII-C2C, with his decades of practical experience of managing areas of significant natural heritage and teaching wildlife conservation discussed as a panellist how the only way to successfully conserve nature is by including the people component. Dr. Neel Kamal Chapagain, Director, Centre for Heritage Management, Ahmedabad University and former WII-C2C Fellow represented the cultural perspective, using his multi-geographic experience of heritage practice and education how practitioners from both nature-culture sides have worked together in landscape conservation and what could be done better.

2.C. Forest Governance vis-a-vis interface of Laws related to Forest, Wildlife and Biodiversity (23rd - 24th September 2021)

WII Wildlife Policy Research Cell, WII-C2C and WII ENVIS Cell jointly organized an in-house training of project personnel and researchers of WII on 'Forest Governance vis-a-vis interface of Laws related to Forest, Wildlife and Biodiversity' on 23rd-24th September, 2021. The objective was to familiarize the attendees with the intricacies and jurisdictions of India's various environmental and forest laws. In sessions and discussions over two days, Dr. Monali Sen, Registrar, WII and Dr. K. Sivakumar, Scientist F, WII led presentations on Wild Life (Protection) Act, Forest Rights Act, Environment (Protection) Act, Biological Diversity Act, Indian Forest Act among others for the benefit of nearly 20 participants.

2.D. Workshop on "Safeguarding Natural Heritage through Education, Awareness and Network Building among Teachers and Students" (4th - 5th October 2021)

WII-C2C conducted a workshop on "Safeguarding Natural Heritage through Education, Awareness and Network Building among Teachers and Students" on 4th - 5th October 2021 at Joshimath, Uttarakhand. The workshop aimed to build the capacity of teachers on the various aspects associated with the Nanda Devi and Valley of Flower World Heritage Site. A series of lectures was conducted on the role of teachers in heritage conservation, basic concepts of World Heritage, importance of biodiversity documentation and a practical session on natural heritage monitoring. A total of 15 teachers participated from 10 different schools within the 5 km buffer of the World Heritage Site.

2.E. Skill Development Workshop-II for Naturalist/Tour Guides of Great Himalayan National Park Conservation Area" (2nd - 5th October 2021)

WII-C2C organized the second "Skill Development Programme for Naturalist/Tour Guides of Great Himalayan National Park Conservation Area" at the Park's Sainj Offices in Kullu (HP), respectively, where a series of technical sessions led the participants through the role and requirements of a naturalist/tour guide. followed by sessions on World Heritage values, significance of sustainable tourism and various technical requirements for nature/tourist guiding in natural protected areas. 30 local youth participants were trained in the programme.

2.F. One-Week Online training workshop on Management Effectiveness Evaluation (MEE) of Protected Areas and World Heritage Sites (25th - 29th October 2021)

As part of the 'One-Week Online training workshop on Management Effectiveness Evaluation (MEE) of Protected Areas and World Heritage Sites' for IFS officers conducted by WII with support from MoEFCC, WII-C2C held sessions on World Heritage, reporting and monitoring mechanisms and use of Heritage Toolkit for MEE. A panel discussion was held on the subject, including included the Director, WII and

other senior officers. The training benefitted some 20 forest officers.

2.G. Webinar on “Bastions of Conservation: Natural Heritage in the Asia Pacific” (18th November 2021)

WII-C2C organized a webinar on “Bastions of Conservation: Natural Heritage in the Asia Pacific” on Thursday, the 18th of November. In his extensive talk, the keynote speaker, Mr. Guy Debonnet, Chief of Unit – Natural Heritage, World Heritage Centre, UNESCO Paris began with the international significance of the Convention's 49th anniversary, before turning to examples on natural heritage from the Asia-Pacific. He provided an overview of the concept of Outstanding Universal Value (OUV), site reporting and monitoring mechanisms and the factors affecting the sites. The opening remarks by Dr. Dhananjai Mohan, Director, WII included the practical experiences of managing a WHS, while the activities of the centre was presented by Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C. Approximately 50 persons from a cross-section of countries of the Asia-Pacific and beyond including China, Thailand, Bangladesh, South Korea, Bhutan and the UK attended the webinar.

2.H. Geography Week / GIS Day (15th - 19th November 2021)

On Geography Week / GIS Day (15-19-Nov-2021), the WII-C2C hosted a 2-day researcher-led workshop on "Applications of Geospatial Data in Natural Heritage Management" in a hybrid mode (offline and online). A large gathering consisting of 80 researchers and staff attended the event. On Day 1, WII faculty Dr. Gautam Talukdar, Dr. K. Ramesh and Dr. Panna Lal provided overview and briefed the attendees on the use of GIS, avenues for spatial thinking as well as the GIS facilities available to WII researchers and staff. Thereafter, through a series of presentations by researchers, the basics of GIS (Mr. Amir Lone), available free courses on GIS (Mr. Anuranjan Roy), GIS for World Heritage Management (Dr. Chitiz Joshi), Geostatistics in Stream Networks (Ms. Aashna Sharma) and Application of Drone Technology (Mr. Ravindra and Mr. Ankit Zode), were learnt by the attendees for future applications to their own needs. A series of 2-3 minute lightning talks sent in by researchers from the field set the tone for the hands-on workshop on the Google Earth Engine by Ms. Sneha Pandey and Ms. Saumyata Srivastava. Day 02 also had its fair share of learning as participants had the opportunity to apply Python (Mr. Venkanna), Circuitscape, Fragstat (Dr. Indranil Mondal) and Maxent/Biomod (Mr. Debanjan Sarkar & Dr. Anukul Nath) before concluding. This event has now been conducted for 3 consecutive years led by researchers.

2.I. Webinar on “Mangroves of Plenty: Ecosystem Services in World Heritage Sites” (Tue, 7-Dec-2021)

WII-C2C hosted a webinar on "Mangroves of Plenty: Ecosystem Services in World Heritage Sites". Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C initiated and anchored the webinar emphasising the importance of mangroves as an ecosystem.

Dr. Shizuka Hashimoto, Associate Professor, University of Tokyo, Japan spoke on "Exploring Ecosystem Services of Ishigaki, Japan". He provided a brief introduction to the Asia-Pacific Network's (APN) Mangrove Project before detailing the research done on the natural and cultural ecosystem services provided by the mangroves in the popular Japanese tourist destination of Ishigaki Island. Dr. Rajarshi Dasgupta, Senior Policy Researcher, IGES, Japan presented the "Insight into Conservation & Management of Mangroves in Indian Sundarban". He conveyed the landscape history of the Sundarban Delta before extensively discussing the plausible future scenarios and two studies done in the mangroves for various factors like market forces, climate change, sustainability and non-material values. Around 30 participants from across the Asia-Pacific region participated in the webinar.

2.J. Webinar on "Mountains and World Heritage: Fountainheads of Life" (13th December 2021)

In commemoration of International Mountain Day (celebrated on 11th December every year). Dr. Gautam Talukdar, Faculty In-Charge initiated the programme with an overview of the importance of mountains and their notable presence on UNESCO's Natural/Mixed World Heritage Sites' list. Dr. Dhananjai Mohan, Director, WII expressed his pleasure at the occasion where all participants who are fascinated by mountains have come together to learn and appreciate their critical contribution. He further shared his practical experience of managing a mountain World Heritage Site in India. Dr. S Sathyakumar, Scientist - G, WII and Keynote Speaker of the day delved into a comparative analysis of 4 iconic Himalayan World Heritage Sites - those of GHNP, Nanda Devi and Valley of Flowers, Khangchendzonga and Sagarmatha - with examples of their spectacular beauty, unique biodiversity and issues affecting their Outstanding Universal Values. He also fielded audience questions on the mountains' larger connections with people who lived further away from them, administrative overlaps and addressing the impact of invasive species. About 50 participants including those based in France, Central America and Myanmar were registered in the webinar.

2.K. Webinar on "Tourism and World Heritage – Maximizing Benefits, Boosting Nature" (22nd February 2022)

With the objective of reaching out to a wide diversity of audience in the context of the 50th year anniversary of the historic World Heritage Convention, focusing on tourism in the World Heritage sites, WII-C2C conducted a webinar on "Tourism and World Heritage – Maximizing Benefits, Boosting Nature" on Tuesday, 22nd February 2022 with the keynote address by Mr. Lazare Eloundou Assomo, the Director of the World Heritage Centre (Paris). Mr. Assomo spoke about the significance of natural heritage,

global framework of sustainable tourism and particularly highlighted the impact of pandemic on tourism and heritage sites. To an engaged audience, he posed a few key questions on what role can tourism and travel play globally; and how tourism and travel could transition into one of the world's largest sustainable industries? He emphasised the importance of destination stewardship, transparency and the economic impact for goods and services. Another critical question he raised was on how domestic vs. foreign mass tourist capacity could be rethought. Addressing these imbalances, he suggested reducing the over-reliance on international tourism is the path to recovery and sustainability. Dr. Dhananjai Mohan, Director WII acknowledged that the COVID-19 pandemic has had an impact on tourism around the world, impacting businesses and livelihoods, and forcing us to rethink, reboot, and start over. He highlighted areas in India such as Keoladeo National Park, a Natural World Heritage Site, where a major portion of the local population benefits directly from sustainable tourism, and where locals are involved in the management and profits derived from the protected area. Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C, summarized the WII-C2C's mission and mandate on World Natural Heritage in the Asia-Pacific region through training, research, information dissemination, and network building. Over 50 participants from the Asia-Pacific and beyond attended the webinar.

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.

3.A. Periodic Reporting - Submission of State Party India Questionnaires (July 2021)

WII-C2C continued to be integrally involved with the current Third Cycle of Periodic Reporting for World Heritage Sites of Asia and the Pacific Region during April to July 2021. Training and technical support provided by WII-C2C to Site Managers of 8 natural/mixed World Heritage Sites of India led to the country's successful completion and submission of Periodic Reporting Questionnaires of the sites on UNESCO online system. The process further helped to strengthen information and enhance the capacity of Site Managers of Natural/Mixed World Heritage Sites of India.

3.B. Archaeological Survey of India Meeting on India's Nomination to the World Heritage Committee (10th December 2021)

WII-C2C participated in the virtual meeting organised by the Archaeological Survey of India under the Chairmanship of DG, ASI to discuss various matters related to World Heritage matters and India's role as a newly elected member of the World Heritage Committee. Director, WII, as expert member (natural heritage) in the Indian delegation to the Committee highlighted the significance of natural heritage site requirements, support on World Heritage matters to neighbouring/friendly countries of India and about the need to ensure effective dissemination of World Heritage documents/publications to the site level management.

3.C. Ministry of External Affairs and WII Meeting on World Heritage Capacity Building (4th February, 2022)

A meeting between MEA and WII was held in the virtual mode on 4th February 2022 to explore the possibilities of offering development partnership projects to India's existing Global south partners pertaining to Natural Heritage. Discussions were held between Director, WII Shri Dhananjai Mohan and Additional Secretary, MEA Shri Prabhat Kumar, along with supporting personnel from both the organisations. Presentation was made by WII detailing the mandate, mission and key activities of WII, along with its functioning as a UNESCO Category 2 Centre (C2C). The deliberations decided that WII-C2C will share further details of select courses and training modules that can be part of the partnership between MEA and WII and offered to other countries on World Heritage thematic issues.

3.D. Periodic Reporting - Framework Action Plan Meeting (22-23 March, 2022)

As part of the Framework Action Plan Meeting on the Third Cycle of Periodic Reporting in the Asia and the Pacific Region hosted by World Heritage Centre online on 22-23 March, 2022, WII-C2C took part in the sessions where key outcomes and conclusions of the Periodic Reporting exercise were presented in detail by experts from the World Heritage Centre. WII-C2C was also actively involved in the Asia Sub-Regional Consultation where it contributed to discussions and inputs in the breakout groups by strategic priorities of the World Heritage Convention to discuss the framework Action Plan with the National Focal Points of the Region for jointly drafting the Action Plan.

3.E. World Heritage Working Group Meetings (January – March, 2022)

In the run-up to the 45th Session of the World Heritage Committee scheduled to be held in Kazan, Russia in June/July, 2022, India as a member of the Committee is involved in deliberations on a range of issues under consideration by the Committee. Director, WII, as expert member (natural heritage) in the Indian delegation to the World Heritage Committee, with support of the WII-C2C, is presently involved in

discussions and provision of technical backstopping for various issues through Working Group Meetings organised by the World Heritage Committee during January-March, 2022. These include:

- i. Online meeting of Ad-hoc Working Group of States Parties to the World Heritage Convention in conformity with Decision 44 COM 11 (24 January, 2022)
- ii. Meeting of the Open-ended Working Group of States Parties to the World Heritage Convention in conformity with Decision 44 COM 8 (26 January, 2022)
- iii. Meeting of the Open-ended Working Group of States Parties to the World Heritage Convention in conformity with Decision 44 COM 8 (23 February, 2022)
- iv. Meeting of the Open-ended Working Group of States Parties to the World Heritage Convention on the Updating of the Policy Document on Climate Action for World Heritage in conformity with Resolution 23 GA 11 (22 March, 2022)
- v. Meeting of the Open-ended Working Group of States Parties to the World Heritage Convention in conformity with Decision 44 COM 8 (24 March, 2022)

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.

4.A. World Heritage Day 2021 Celebrations (18th April 2021)

18th April is celebrated world-wide as World Heritage Day. On this occasion in 2021, the WII-C2C organized a series of online events to commemorate the occasion. The COVID lockdown restrictions prevented a gathering of heritage enthusiasts in person, but virtual participation was sought in artwork and photography on a range of themes including Nature-Culture Linkage, Heritage & Me, Mesmerizing Nature, Natural Heritage and Associated Threats. The subsequent entries brought forth several ideas which reflected the splendour of natural heritage and artistic expressions of the need to care for it. The different categories of submission from junior school to post graduate researchers added a layer of variety to the competition reflecting the perceptions of heritage in a large cross-section of those on whom the future of

conservation depends.

4.B. IUCN ICCROM Heritage Place Lab (September 2021)

Proceeding on the path to become an important centre for research on nature-culture linkages, WII-C2C is part of a mixed team of researchers and practitioners from Jaipur selected for the inaugural Heritage Place Lab initiative, within the ICCROM-IUCN World Heritage Leadership Programme (WHL). Working with representatives from the School of Architecture & Design, Manipal University, Jaipur; Jaipur Municipal Corporation; Jaipur Town Planning Department and Heritage Cell, Jaipur, the team will develop over a span of 6 workshops scheduled in 2021 and 2022, a practice-based research agenda with the possibility of funding for implementation. Workshops on various themes were held, namely "Models of Research Practice Collaboration" (13 September, 2021); "Knowledge Systems Dialogues" (4, 6, 8 October, 2021); "Building Collaborative Research Agendas" (25-27 October, 2021); "Partnering for Collaborative Research" (Nov 15-17, 2021); "Building a Common Practice Led Research Proposal" (16, 18 March, 2022); and "Publication and Heritage Place Lab Follow up" (30 April, 1 March, 2022). Dr. Gautam Talukdar, Faculty In-Charge, WII-C2C and Mr. Anuranjan Roy, WHA, WII-C2C are representing the natural heritage perspective on the team. This will help WII-C2C to develop sound institutional working relationships for long-term engagement; publish outcomes in scientific journals and World Heritage related channels; take part in an event during the 45th session of the World Heritage Committee (2022) where the Heritage Place Lab outcomes and Research-Practice Teams results will be promoted and aid networking and professional growth among collaborating World Heritage places, institutions, researchers and practitioners.

4.C. World Heritage Cities Dialogues 2021 on the UNESCO HUL Recommendation! Asia and the Pacific region (28th October 2021)

WII-C2C presented on "Jaipur HUL Recommendations" at the "World Heritage Cities Dialogues 2021 on the UNESCO HUL Recommendation! Asia and the Pacific region" (Thu, 28 Oct 2021) commemorating the 10th Anniversary of the 2011 Recommendation on the Historic Urban Landscape (HUL) drawing on their expertise in natural heritage experience and ongoing Heritage Place Lab (HPL) initiative with IUCN-ICCROM. This was an online meeting discussing the possibilities and challenges for implementation of the HUL Recommendation in each world region and city, with a special focus on adaptation and resilience including National Focal Points, site managers, experts and key persons from the local administration of World Heritage cities.

4.D. Participant in Webinar on "World Heritage City Lab – Management of World Heritage Cities" (13th – 14th December 2021) & Webinar on "World Heritage City Lab – Historic Cities, Climate Change, Water, and Energy" (16th - 17th December

2021)

WII-C2C participated in the webinar on "World Heritage City Lab – Management of World Heritage Cities" (13-14 Dec, 2021) about general guidance on management systems and governance for World Heritage cities contributing to the implementation of the Historic Urban Landscape (HUL) Recommendation and also participated in the webinar on "World Heritage City Lab – Historic Cities, Climate Change, Water, and Energy" (16-17 Dec, 2021) aiming to identify key challenges and opportunities facing historic cities and settlements – particularly in coastal areas - in relation to climate action.

5. Research & Monitoring

A function of the Centre is to undertake research on identified priority areas related to natural World Heritage protection and management, including focus on models of community participation. The World Heritage Committee also encourages State Parties to support research, since knowledge and understanding are fundamental to the identification, management and monitoring of World Heritage properties.

5.A. Plausible alternative futures of Island mangroves in the Asia-Pacific: Scenario-based analysis and quantification of mangrove ecosystem services in coastal hazard mitigation and climate change adaptation in Andaman Island, India

A collaborative research study under a project funded by Institute for Global Environmental Strategies (IGES), Japan is being carried out on the mangroves of Andaman Islands in India to combat the possible adverse impacts of climate change. Particularly, ecosystem services of mangroves remain at the centre of discussion considering their exceptional ability to survive in the fragile coastal environment, while providing tremendous services such as storm surge control, sediment retention, arresting carbon, etc. In the preliminary phase, literature review was carried out to understand the Mangrove change patterns over the time. This was followed by Land Use Land Cover of Andaman being classified into different classes based on physiographic features through satellite imaging. Presently, work is undergoing on LULC prediction for 2050 using statistical model, ecosystem services modelling, and mapping of ecosystem services like total carbon, blue carbon, etc.

5.B. Long-term Monitoring of Outstanding Universal Values (OUV) of Great Himalayan National Park Conservation Area

Himachal Pradesh Forest Department and WII-C2C on Natural World Heritage Management and Training for Asia and the Pacific Region, Wildlife Institute of India Dehradun signed a Memorandum of Agreement (MoA), to conduct a study on "Long-term Monitoring of Outstanding Universal Values of Great Himalayan National Park

Conservation Area". In the preliminary phase, desktop review of literature, inception meeting and planning workshops were held with the Himachal Pradesh Forest Department. Based on the outcomes of previous meetings, an orientation programme for frontline staff of GHNPCA was organised on-site on 22-23 December, 2021. The workshop was inaugurated by Dmt. Meera Sharma, Director GHNPCA, who emphasised the importance of the park's values and the need for building capacity of the frontline staff. Dr. V.P.Uniyal, WII faculty, shared his previous experience of long-term monitoring project in the late 1990s. Participating staff were then provided an orientation on practical field-level techniques, monitoring protocol and reporting timelines to be undertaken in the forthcoming period.

5.C. Information Document on Natural and Mixed World Heritage Sites in the Asia and Pacific Region

Presently, systematic information on the status of World Heritage Sites is dispersed among many different platforms and national and international organizations, including the World Heritage List. Beyond the high quality of information on the World Heritage Centre website, essential details may also be found in the IUCN World Heritage Outlook, published scientific studies, and State of Conservation Reports (SoC) filed by State Parties on inscribed world heritage sites. The document under preparation, titled "Information Document on Natural and Mixed World Heritage Sites of the Asia and Pacific Region," will provide a snapshot of the already inscribed sites, including major changes such as re-nominations, extensions, or boundary modifications, threats they face, and management initiatives undertaken by state parties and various other agencies. A comprehensive map of all natural and mixed World Heritage Sites in Asia and the Pacific area is also included in the publication. This thoroughly compiled document will vastly increase our understanding of the present state of WHSs and will serve as educational and awareness material for dissemination to stakeholders.

6. Master's Degree Course in Heritage Conservation and Management (2019-21)

For the completion of their MSc in Heritage Conservation and Management (MSc HCM) course following their field work in the preceding months, the first batch of students presented the dissertations of topics of heritage importance to an external panel of evaluators on 30th and 31st July, 2021. The presentations spotlighted the diversity of interests amongst the students and broad scope of heritage studies as topics from natural, cultural and interlinked domains were explained to an open audience assembled in the WII Auditorium and streamed online. The names of the students and the titles of the dissertations are as listed below:

MSc in Heritage Conservation and Management 2019 - 2021 Dissertation Topics		
Sr. No.	Student Name	Dissertation Topic
1	Abhishek	Relocation and Resilience: A Case Study from Sariska Tiger Reserve
2	J Bhaalasaraswathi	Pre and Post COVID-19 Transformation in the Financial and Marketing Practices of Museums: An Analysis of the Government Museum Chennai, and City Palace Museum, Udaipur
3	Devashish Saurav	Storied Landscapes: A Study of the Ecological Narratives of the Bhotiyas (Tolchhas, Marchas and Jads) of Uttarakhand
4	Malsawmdawngliana	Assessing the Impact of the Traditional Practice of Frog Consumption on Amphibian Population from Mizoram, India: Culture-Nature Perspectives
5	Roshme Borgohain	Assessing the Impact of Road Network on Wildlife Corridors and Mitigation Measures in Assam: Transportation against Animal Corridor
6	Varsha S	Economy as a Driver of Functional Continuity of Living Religious Heritage: The Case of Sri Ranganathaswamy Temple at Srirangam
7	Vishnuvardhan	Conserving Natural Heritage through Genetic Assessment: The case of Snow Leopards in Ladakh

The dissertation presentations and subsequent grading of the students marked the successful passing out of the first batch of seven students of MSc in Heritage Conservation and Management.

7. Collaborations

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

- Archaeological Survey of India
- Himachal Pradesh Forest Department
- IUCN
- ICCROM
- ICOMOS

- Institute for Global Environmental Strategies (IGES), Japan
- University of Tsukuba, Japan
- Madhya Pradesh Tourism Board, Bhopal
- Madhya Pradesh Forest Department
- Meghalaya Forest Department
- Saurashtra University
- World Heritage Centre, Paris

Select Photo-Plate



Figure 1: Workshop I - GHNP



Figure 2: Workshop II - GHNP



Figure 3: IUCN WCC



Figure 4: IUCN WCC



Figure 5: Team at Garo Hills

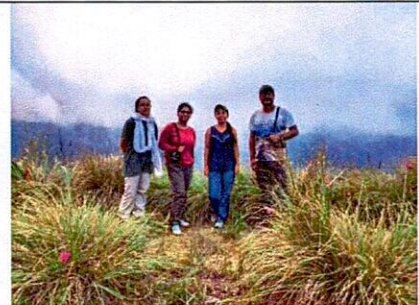


Figure 6: Team at Garo Hills

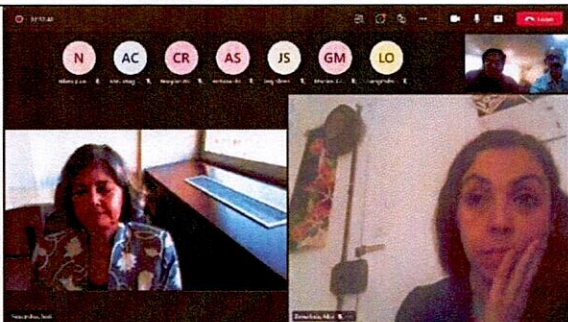


Figure 7: HUL Anniversary Meeting



Figure 8: GIS Day at WII-C2C



Figure 9: GIS Day at WII-C2C



Figure 10: Webinar "Bastions of Conservation"

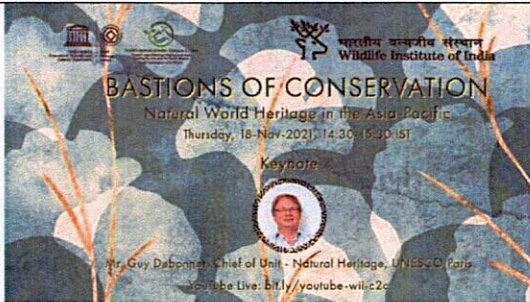


Figure 11: Webinar "Bastions of Conservation"



Figure 12: Webinar "Mangroves of Plenty"

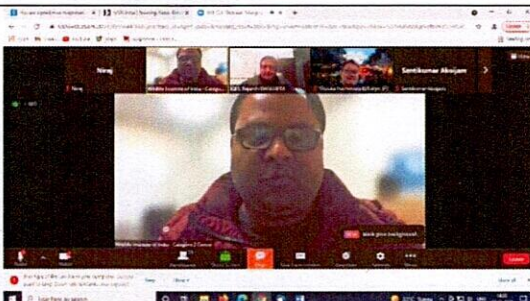


Figure 13: Webinar "Mangroves of Plenty"



Figure 14: Webinar "Mountains and WH"

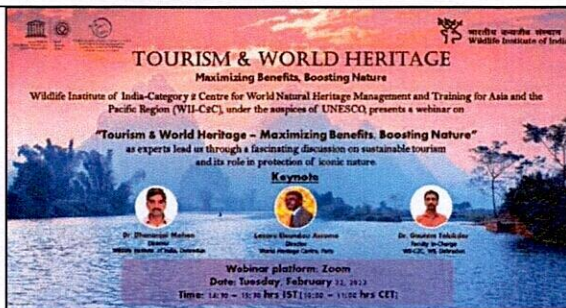


Figure 15: Webinar "Tourism & WH"



Figure 16: Webinar "Tourism & WH"