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**REPORT ON THE MISSION TO CHITWAN NATIONAL PARK, NEPAL
FROM 14 TO 21 MARCH, 2016**



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**REMCO VAN MERM
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LIST OF ACRONYMS

BZMC	Buffer Zone Management Committee
BZUC	Buffer Zone User Committee
CA TS	Conservation Assured Tiger Standards
DNPWC	Department of National Parks and Wildlife Conservation
DoLIDAR	Department of Local Infrastructure Development and Agricultural Roads
DPR	Detailed Project Report
EIA	Environmental Impact Assessment
IBA	Important Bird and Biodiversity Area
IEE	Initial Environmental Evaluation
IUCN	International Union for Conservation of Nature and Natural Resources
MoFSC	Ministry of Forest and Soil Conservation
NGO	Non-Governmental Organisation
OUV	Outstanding Universal Value
Ramsar	Convention on Wetlands of International Importance (the Ramsar Convention)
ROW	Right of Way
UG	User Group
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
WWF	World Wide Fund for Nature

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EXECUTIVE SUMMARY

Chitwan National Park (the property), which covers 93,200 ha, was inscribed on the World Heritage List in 1984 under criteria *vii* (natural beauty), *ix* (ecological processes), and *x* (habitat for endangered species). There is a long history of examination by the World Heritage Committee (the Committee) and its Bureau of the state of conservation of the property, including since 2001 in relation to concerns raised about the construction of a bridge over the Rapti River at Kasara, the construction of a road through the property to provide access to the villages in the Madi Valley south of the park, and a proposed power line following the same alignment as the road. In response to these concerns, an IUCN monitoring mission visited the property from 16 to 20 December 2002, and the Committee continued to monitor the implementation of measures to address these issues until 2004. In 2014, new concerns were raised about the proposed construction of a road and a railroad through the property. From 16 to 19 June 2015 a joint UNESCO-Kathmandu / IUCN-Nepal fact finding mission visited the property to gather more information about these infrastructure projects, and found that many other infrastructure projects are also being considered by policy makers, which, if all implemented as planned, would likely cause the property to become fragmented into eight to ten parts. In addition the fact finding mission raised concern about encroachment at Gajendra Dham, where a temple had been built without prior Environmental Impact Assessment.

From 14 to 21 March 2016, an IUCN reactive monitoring mission visited Chitwan National Park, as requested by the Committee in Decision **39 COM 7B.15** (Bonn, 2015), in order to assess the abovementioned issues. In Kathmandu, the mission was able to meet with key stakeholders from government, including representatives from the Department of National Parks and Wildlife Conservation, the Department of Roads, the Department of Railways, and the Department of Local Infrastructure Development and Agricultural Roads. Still in Kathmandu, the mission was also able to meet with representatives from Nepal Telecom, and from various NGOs working in Chitwan National Park and/or its buffer zone. In the field, the mission met with local representatives from Nepal Telecom and from the temple complex at Gajendra Dham, as well as with representatives from local communities at Sauraha, Thori and Triveni.

The mission was able to discuss and assess all the issues noted in its terms of reference, including all known proposed road projects that would affect the property, the East-West Electric Railway through the property, the optical fibre project, poaching, and the encroachment at Gajendra Dham. In addition, the mission was able to assess issues of human-wildlife conflict and encroachment in the buffer zone of the property.

The mission found that the state of conservation of the property remains good thanks to effective management by the Chitwan National Park Office and successful anti-poaching operations with the support of the Nepal Army. Nevertheless, the property's Outstanding Universal Value (OUV) is threatened by a number of ongoing issues and threats from new development proposals. The most significant ongoing issues relate to the spread of invasive species, in particular *Eichhornia crassipes* in wetland habitats and *Mikania micrantha* in grassland habitats, and to the increasing problem of human-wildlife conflict.

The mission notes with significant concern that the proposed East-West Electric Railway, the Terai-Hulaki Highway, and other proposed road developments could have significant direct, indirect, and/or cumulative impacts on the OUV of the property. The mission concludes that if any of these proposed infrastructure developments were to proceed according to their planned alignment through the property, they would form a clear basis for the inscription of the property on the List of World Heritage in Danger, in accordance with Paragraph 180 of the *Operational Guidelines*.

Recalling the recommendations made by the 2002 IUCN monitoring mission for the State Party to:

- a. *“Give a commitment that the road, which is actually a right of way for the Madi Valley residents, will not be used as a thoroughfare, especially for transportation of commercial goods to destinations beyond Madi.*

[...]

- h. *Give a commitment not to demand opening of the internal park road (that goes close to the Tamor Tal) as an alternative to the link road at any time in the future.*
- i. *Give the commitment not to upgrade the status of the existing public ROW, which is a Hulaki road (postal road) to any higher status, such as a highway or others that would enable it to be metalled.*
- j. *Regulate the times of operation of traffic passing over the Kasra Bridge and the ROW between sunrise and sunset or at certain hours of the day only, enforce strictly the 40 km speed limit, and also consider limiting the number of vehicles that could pass through during the course of a day. The condition to limit the operation time and the flow of traffic should not be rescinded in the face of public or political pressure in future, as was done in the case of the national highway that passes through the Royal Bardia National Park [...].*

[...]”,

the mission recommends that the State Party:

- R1. Improve communication and coordination between different government institutions and ministries in order to increase awareness about the World Heritage status of Nepal’s World Heritage properties, including Chitwan National Park, and the legal requirements that need to be adhered to in case of development proposals that may impact on their Outstanding Universal Value;**
- R2. Upgrade parts of the Bharatpur-Thori road that are located outside the property in order to improve access to educational, health, and other facilities to the communities in the Madi Valley, while ensuring that any upgrading or widening of those parts of the road that are located inside the property shall not be permitted, maintaining current restrictions on the use of the road between 22:00**

o'clock and 6:00 o'clock, and that the road will not be used as a thoroughfare, especially for transportation of commercial goods to destinations beyond Thori;

- R3. Make a commitment to not approve any other current or future proposed roads through the property, including:**
- a. the Terai Hulaki Highway,**
 - b. the State 3 and State 4 proposed China-India Trade Links,**
 - c. the Dumkibas-Triveni road,**
 - d. the Madi-Balmiki Ashram road, and**
 - e. the Thori-Malekhu road,**

given their likely significant negative impacts on the Outstanding Universal Value of the property, the potential loss in tourism revenue, and the availability of viable alternative alignments that would not cut through the property, and taking into account the specific recommendations made in this report for each of these roads;

- R4. Ensure that the proposed road from Thori to Birgunj is subject to a thorough Environmental Impact Assessment (EIA) in accordance with applicable laws, including in relation to the potential for this road to increase the demand for transportation of commercial goods through the Madi Valley and the property, and including a specific assessment of potential direct, indirect and cumulative impacts on the Outstanding Universal Value of the property in line with IUCN's World Heritage Advice Note on Environmental Assessment;**
- R5. Make a firm commitment to the conservation of the property by making a decision to not approve the construction of the East-West Electric Railway along its proposed alignment through the property, and instead to divert the railway around the property, regardless of the additional construction costs that would be incurred in the short term, as these would likely be outweighed by the long-term economic benefits of establishing a rail connection to the economically important cities of Narayanghad/Bharatpur and Hetauda;**
- R6. Ensure, in collaboration with Nepal Telecom and the Chitwan National Park Office, the implementation of adequate measures to avoid and mitigate any impacts on the Outstanding Universal Value of the property that could result from the construction of the Optical Fibre between Kasara and Bankatta;**
- R7. Ensure that an EIA for the proposed Trivenidham-Balmiki Ashram Suspension Bridge and its associated foot trail through the property is conducted in accordance with applicable laws and prior to starting any construction work, including an assessment of impacts on the Outstanding Universal Value of the property, in line with IUCN's World Heritage Advice Note on Environmental Assessment;**

- R8. In collaboration with the Chitwan National Park Office and the responsible authorities at Gajendra Dham, develop a management plan for Gajendra Dham which should include:**
- a. An appropriate zonation scheme to set aside areas for spiritual purposes and for nature conservation;**
 - b. Appropriate limits on any further construction of facilities, beyond the normal maintenance works;**
 - c. Adequate measures to minimize impacts from the large number of pilgrims visiting the site annually, including a waste management plan and provisions to allow only daytime ritual activities under the observation of the Chitwan National Park Office;**
- R9. Clearly demarcate on the ground the entire boundary of the property, giving priority to known areas of conflict or confusion, including the entire area west of the Narayani River;**
- R10. Maintain current anti-poaching efforts in collaboration with the Nepal Army, in order to ensure the continued success of anti-poaching operations;**
- R11. Coordinate with the Chitwan National Park Office, the Department of National Parks and Wildlife Conservation and other relevant government institutions, local communities, NGOs and international organisations to seek appropriate solutions to address encroachment of important wildlife habitats in the buffer zone of the property and to rehabilitate encroached areas, in order to ensure the conservation of wildlife corridors and to reduce human-wildlife conflict;**
- R12. Investigate the impacts from the recent construction of flood control dykes on the northern bank of the Rapti River outside the property, and ensure that any proposed construction of flood control dykes is subject to a full EIA, including a specific assessment of impacts on the Outstanding Universal Value of the property;**
- R13. Monitor populations and movements of Gangetic River Dolphin and Gharial in order to assess how these species may be affected by dams on the Narayani River downstream of the property, and to identify measures to ensure their conservation.**

1. BACKGROUND TO THE MISSION

The Chitwan area was protected as a Royal hunting reserve from 1846 to 1951. In 1963, an area south of the Rapti river was demarcated as a rhinoceros sanctuary. This was later incorporated into the National Park, which was established in 1973 under the National Park and Wildlife Conservation Act, encompassing 54,400 ha at the time. Some 22,000 residents were moved out of the area upon its establishment as a national park. In 1977 the national park was extended to its present size of 93,200 ha.

The property was inscribed on the World Heritage List in 1984 as Royal Chitwan National Park under then natural criteria (ii), (iii) and (iv), equivalent to the current criteria (ix), (vii) and (x), respectively. During its 35th session (UNESCO, 2011) the World Heritage Committee (the Committee) through Decision **35 COM 8B.2** approved a name change to the property, as proposed by the Nepalese authorities, to become Chitwan National Park.

The justification for the inscription of the property under each of the criteria is as follows (excerpts taken from the Statement of Outstanding Universal Value):

Criterion (vii) – *“to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance”*.

“The spectacular landscape, covered with lush vegetation and the Himalayas as the backdrop makes the park an area of exceptional natural beauty. The forested hills and changing river landscapes serve to make Chitwan one of the most stunning and attractive parts of Nepal’s lowlands. Situated in a river valley basin and characterized by steep cliffs on the south-facing slopes and a mosaic of riverine forest and grasslands along the river banks of the natural landscape makes the property amongst the most visited tourist destination of its kind in the region. The property includes the Narayani (Gandaki) river, the third-largest river in Nepal which originates in the high Himalayas and drains into the Bay of Bengal providing dramatic river views and scenery as well as the river terraces composed of layers of boulders and gravels.”

Although cultural and/or spiritual values are not part of criterion (vii) as it is currently defined, in 1984 when the property was inscribed the corresponding natural criterion (iii) included *“exceptional combinations of natural and cultural elements”*. Since 1992, significant interactions between people and nature have been recognized under cultural criteria and identified on the World Heritage List as Cultural Landscapes. Nevertheless, the justification for the property’s inscription under criterion (vii) still makes reference to the cultural importance of the property, as follows:

“The property includes two famous religious areas: Bikram Baba at Kasara and Balmiki Ashram in Tribeni, pilgrimage places for Hindus from nearby areas and India. This is also the land of the indigenous Tharu community who have inhabited the area for centuries and are well known for their unique cultural practices.”

Criterion (ix) – “to be outstanding examples representing significant on-going ecological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals”:

“Constituting the largest and least disturbed example of sal forest and associated communities, Chitwan National Park is an outstanding example of biological evolution with a unique assemblage of native flora and fauna from the Siwalik and inner Terai ecosystems. The property includes the fragile Siwalik-hill ecosystem, covering some of the youngest examples of this as well as alluvial flood plains, representing examples of ongoing geological processes. The property is the last major surviving example of the natural ecosystems of the Terai and has witnessed minimal human impacts from the traditional resource dependency of people, particularly the aboriginal Tharu community living in and around the park.”

Criterion (x) – “to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation”:

“The combination of alluvial flood plains and riverine forest provides an excellent habitat for the Great One-horned Rhinoceros and the property is home for the second largest population of this species in the world. It is also prime habitat for the Bengal Tiger and supports a viable source population of this endangered species. Exceptionally high in species diversity, the park harbours 31% of mammals, 61% of birds, 34% of amphibians and reptiles, and 65% of fishes recorded in Nepal. Additionally, the park is famous for having one of the highest concentrations of birds in the world (over 350 species) and is recognized as one of the worlds’ biodiversity hotspots as designated by Conservation International and falls amongst WWFs’ 200 Global Eco-regions.”

At the time of the property’s nomination for inscription on the World Heritage List, the IUCN evaluation noted that the property is managed to a high standard, as demonstrated by a four-fold increase in the rhino population and the revegetation and stabilization of the banks of the Rapti River. Threats identified at the time included some subsistence poaching of vegetation and fuelwood along the boundaries and intensive fishing in the rivers outside the property, as well as a significant resentment harboured by local villagers towards the park due to crop damage by wildlife. The National Parks Office has been addressing this problem by allowing villagers to collect thatch grass in the park, a practice which continues to this day, and which does not represent a negative impact.

There is a long history of examination by the Committee and its Bureau of the state of conservation of the property. During the 1990s, the concerns raised by the Committee and its Bureau included a large-scale irrigation project (which was abandoned), rhino and tiger poaching, and pollution of the Narayani River by industrial effluents.

At its 25th session (Paris, 2001), the Bureau in Decision **CONF 205 V.126-127** expressed its concern about the planned construction of a bridge over the Rapti river at Kasara, a proposed road through the property to provide access to the villages in the Madi Valley south of the park,

and a proposed power line following the same alignment as the road. Of the three projects, only the power line had been subject to an Environmental Impact Assessment (EIA). In Decision **CONF 201 XII.6-10**, the Bureau at its 26th session (Paris, 2002) expressed its support for measures that would reduce the impact of the power line on the property and noted that an underground transmission line would have the least potential impact. It also invited the State Party to undertake an EIA for the Kasara Bridge and the associated road through the property, and requested the State Party to invite a monitoring mission to the property in order to assess the impacts of the various proposed developments. Subsequently, an IUCN monitoring mission visited the property from 16 to 20 December 2002, which noted that although the bridge and road were built without conducting an environmental assessment, they improved an existing facility for residents of the Madi Valley to access the area north of the property. The mission recommended that the public use of the Kasara Bridge and the road linking it to the existing public right of way (ROW) could be approved with thirteen strict conditions. Given their relevance for the issues examined by the current mission, some of these conditions are recalled here below:

- a. *“Give a commitment that the road, which is actually a right of way for the Madi Valley residents, will not be used as a thoroughfare, especially for transportation of commercial goods to destinations beyond Madi.*

[...]

- h. *Give a commitment not to demand opening of the internal park road (that goes close to the Tamor Tal) as an alternative to the link road at any time in the future.*
- i. *Give the commitment not to upgrade the status of the existing public ROW, which is a Hulaki road (postal road) to any higher status, such as a highway or others that would enable it to be metalled.*
- j. *Regulate the times of operation of traffic passing over the Kasra Bridge and the ROW between sunrise and sunset or at certain hours of the day only, enforce strictly the 40 km speed limit, and also consider limiting the number of vehicles that could pass through during the course of a day. The condition to limit the operation time and the flow of traffic should not be rescinded in the face of public or political pressure in future, as was done in the case of the national highway that passes through the Royal Bardia National Park [...].*

[...]”.

In Decision **27 COM 7B.9**, adopted at its 27th session (Paris, 2003), the Committee invited the State Party *“to provide a detailed work plan to implement recommendations outlined in the IUCN monitoring mission report and to regularly report progress on the implementation of those measures to the Committee”.* In Decision **28 COM 15B.11**, adopted at its 28th session (Suzhou, 2004), the Committee commended the Department of National Parks and Wildlife Conservation of Nepal (DNPWC) *“for devising a system of controls on the use of the Kasara Bridge and the system of associated roads to minimize [their negative impacts]”,* and invited the State Party *“to*

ensure that all other sectors of Government, including the Department of Roads and authorities representing local communities, fully respect the decisions of and co-operate with DNPWC to ensure effective functioning of the system of controls on the road bridge and the protection of the [OUV of the property]".

The state of conservation of Chitwan National Park was next examined by the Committee at its 38th session (Doha, 2014), when it noted with concern (Decision **38 COM 7B.69**) *"the reported plans for the East-West Electric Railroad and the Terai Hulaki Highway crossing the property and that construction of bridges related to the highway project is reported to have started in the buffer zone of the national park"*, and considered *"that these projects, if implemented as planned through the property, would represent a clear potential danger to the Outstanding Universal Value (OUV) of the property, including through habitat fragmentation, wildlife disturbance and an increased risk of poaching and other illegal activities"*. The Committee then requested the State Party to ensure that Environmental Impact Assessments (EIA) would be completed for both projects, in line with IUCN's World Heritage Advice Note on Environmental Assessment, and further requested the State Party *"to put on hold any construction of infrastructure that could preclude the viability of alternative alignments that would avoid the property, until the EIA processes for both projects have been completed"*. These concerns and requests were reiterated by the Committee at its 39th session (Bonn, 2015), when it also requested the State Party to undertake an EIA for the proposed Balmiki Ashram-Trivenidham suspension bridge and to submit the EIA for a proposed optical fibre project that would cross the property. The Committee also requested the State Party to provide further information on the status of poaching of rhino and other wildlife in order to demonstrate the continued success of anti-poaching operations, following two recent years (2011 and 2013) of zero rhino poaching in the property.

In Decision **39 COM 7B.15**, the Committee requested the State Party to *"invite an IUCN Reactive Monitoring mission to the property in order to review potential impacts from the abovementioned developments on its OUV, and to provide advice on alternative options for infrastructure development that would not have a negative impact on OUV"*. This mission took place from 14 to 21 March 2016, and its findings and recommendations are reported in this document.

It should further be noted that from 16 to 19 June 2015 a joint UNESCO/IUCN fact finding mission, carried out by representatives from the UNESCO and IUCN offices in Kathmandu, visited the property to identify challenges faced in light of the various infrastructure projects being proposed and find potential solutions. This joint mission found that in addition to the East-West Railway and the Terai-Hulaki Highway, many other infrastructure projects are being considered by policy makers, including China-India trade links, which, if all implemented as planned, would likely cause the property to become fragmented into eight to ten parts. In addition the fact finding mission noted that some 400 ha of the property were reported to have been encroached following the construction of a temple at Gajendra Dham without prior assessment of impacts and without any consultation with the Chief Conservation Officer of the property. The current mission also had the opportunity to assess these additional issues.

2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1. Protected area legislation

Relevant legislation for the preservation and management of the property includes (but may not be limited to):

- The National Parks and Wildlife Conservation Act, 1973;
- Buffer Zone Regulations, 1996;
- Buffer Zone Guidelines, 1999;
- Environment Protection Act, 1997;
- Water Resources Act, 1992;
- Forest Act, 1992;
- Soil and Water Conservation Act, 1982;
- Tourism Act, 1978.

2.2. Institutional framework

Chitwan National Park is administered by the Chitwan National Park Office, which falls under the Department of National Parks and Wildlife Conservation (DNPWC) of the Ministry of Forests and Soil Conservation.

2.3. Management structure

The current management plan of Chitwan National Park and its buffer zone, which covers the period 2013-2017, provides a clear overview of its management structure. The Chief Conservation Officer (park manager) heads the administration of the park, and is supported in his job by four Assistant Conservation Officers. These each head one of four sectors of the park (Sauraha, Kasara, Madi Bagai, and Amaltari), except in Kasara which is headed by the Chief Conservation Officer. The Chitwan National Park Office has its headquarters at Kasara, and is supported in its efforts for the protection of the park by a battalion and a company of the Nepal Army. The battalion, under the command of a Lieutenant Colonel, also has its headquarters at Kasara, while the company, under the command of a Major, is based at Amaltari in Nawalparasi District. There is a total of 50 army and security posts established throughout the park and its buffer zone. Of these, 28 are located inside the property.

The Chitwan National Park Office has a total of 270 staff, of which 129 operate elephant stables, while the remaining 141 perform park administration functions, including 18 rangers, 79 game scouts and 15 senior game scouts.

The buffer zone, which is not part of the property nor officially recorded in World Heritage Convention documents, is managed by a Buffer Zone Management Committee (BZMC), which consists of 21 Buffer Zone User Committees (BZUC), 1 sub-committee, and 1779 User Groups (UG). This approach to buffer zone management enables the protection of the core zone of a national park through community-based natural resource management in its surroundings. This

is a major conservation strategy in Nepal. According to the 2013-2017 Management Plan, the BZMC receives 50% of the revenue generated by Chitwan National Park for conservation and socio-economic development.

2.4. Other international designations and programmes

In 2003 the Beeshazar and Associated Lakes, located in the buffer zone of the property, were declared a Ramsar Site. In 2005, the entire Chitwan National Park and most of its buffer zone were declared an Important Bird and Biodiversity Area (IBA). Since January 2015, Chitwan National Park also became the first ever Conservation Assured | Tiger Standards (CA|TS) Accredited Site.

3. IDENTIFICATION AND ASSESSMENT OF ISSUES/THREATS

Issues raised by the Committee

3.1. Roads

The mission was able to obtain a map (figure 1a-g) showing the alignments of all known proposed road projects that would cross through the property. In total, seven (7) such roads were identified, namely:

- a) the Terai-Hulaki Highway
- b) the State 3 proposed China-India Trade Link
- c) Bharatpur-Thori
- d) Dumkibas-Triveni
- e) the State 4 proposed China-India Trade Link
- f) Madi-Balmiki Ashram
- g) Malekhu-Thori

An eighth road from Thori to Birgunj is also being proposed (figure 3). This road would not cross the property, but would be aligned close to its southern boundary.

It should be noted that the Department of Roads was able to provide the mission with further information only on the Terai-Hulaki Highway and the Thori-Birgunj road. None of the other proposed roads are currently being actively planned for at the level of the Department of Roads. It should also be noted that some of these proposed roads (partly) follow the same alignment: i) the State 3 proposed China-India Trade Link (figure 1b) follows the same alignment as the Bharatpur-Thori road (figure 1c), and partly the same alignment as the Terai-Hulaki Highway (figure 1a); and ii) the State 4 proposed China-India Trade Link follows the same alignment as the Dumkibas-Triveni road (figure 1d&e). Notwithstanding their overlapping alignments, each of these roads are proposed by different stakeholders and for different purposes, and should therefore be considered as separate projects. Each of these road projects is discussed in detail below.

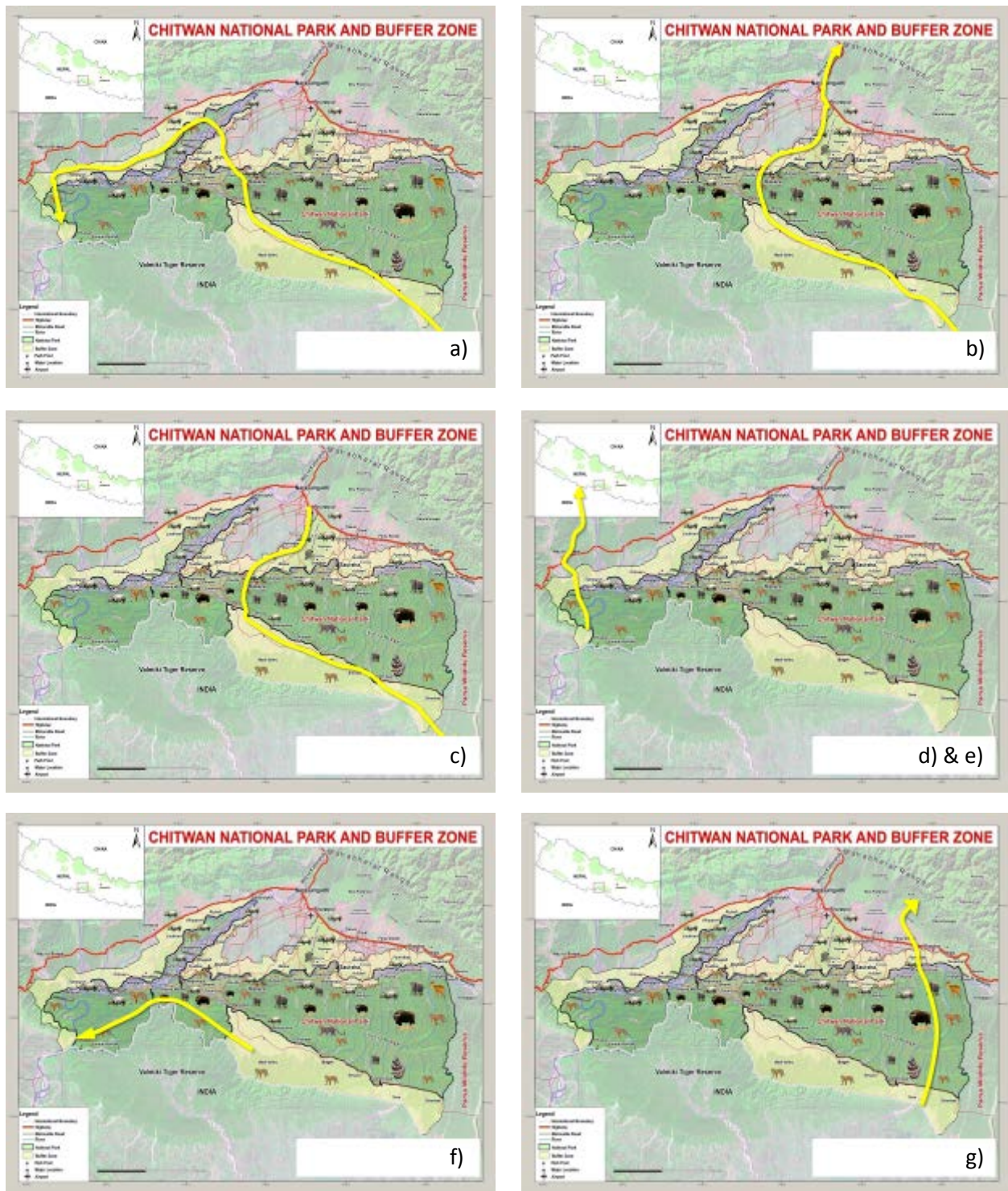


Figure 1: The maps show in red the existing east-west highway to the north of the property, and in yellow the various proposed road projects that would cross the property: a) Terai-Hulaki Highway; b) State 3 proposed China-India Trade Link; c) Bharatpur-Thori; d) Dumkibas-Triveni; e) State 4 proposed China-India Trade Link, following the same alignment as d); f) Madi-Balmiki Ashram; and g) Malekhu-Thori. *Source: modified from Chitwan National Park Office, 2016: powerpoint presented to the mission.*

3.1.1. Terai Hulaki Highway

The mission was able to meet with representatives from the Department of Roads, who provided more information on the planned Terai Hulaki Highway, which would be an upgrade of an existing road. As a result, the existing gravel road through the property from Kasara to Madi Valley would be tarmacked and widened, although no clarity was given as to the number of lanes that would be envisaged. The Department of Roads noted that it is aware of the fragmentation caused to habitats by road construction, and stated to be committed to constructing the road with all appropriate mitigation measures in place, including wildlife underpasses and overpasses inside the property. The Department of Roads showed photos of the type of underpasses that would be constructed, and the mission was also able to observe directly the construction of a wildlife underpass that was ongoing on the existing East-West Highway. The mission is concerned that the narrow design of these underpasses may not be suited to all wildlife species that would be likely to be affected by habitat fragmentation that would be caused by the Terai Hulaki Highway. Therefore, the suitability of different types of wildlife crossings would need to be assessed before a decision is made on the construction of the road.

The mission also discussed this proposed road with representatives from local communities at Sauraha on the northern boundary of the property, and at Thori in the Madi Valley. It was clear that these communities would welcome the development opportunities that would result from road construction, but not at the expense of the National Park. For these communities, the property brings revenue from tourism, although tourism is still limited in the Madi Valley. The representatives from the Thori community also expressed their concern that if wildlife is disturbed by the construction and operation of the Highway, they would disperse into human settlements, increasing human-wildlife conflict (see section 3.7 below). From the discussions with the Thori community representatives, it became clear to the mission that the priority for this community is to gain better access to Bharatpur (see section 3.1.3. below), but that a Highway was considered likely to cause more disturbance than benefits.

The mission further observes that the alignment of the proposed Terai Hulaki Highway (figure 1a) runs close and parallel to the existing East-West Highway. As its construction along this alignment would be likely to result in the fragmentation of the property into four parts and cause the destruction of important wildlife habitats, the mission considers that the likely environmental costs of this proposed alignment would far outweigh the potential economic benefits, in particular considering the potential loss of revenue from tourism, which could affect not only the Chitwan region, but the national tourism industry of Nepal. The mission considers that alternative options exist that could generate more significant economic benefits, through the upgrading of existing roads that go around the property and connect to the existing East-West Highway.

The mission recommends that the State Party:

- **Not approve the proposed Terai Hulaki Highway with its current design and proposed alignment through the property, given its likely significant negative impacts on the Outstanding Universal Value of the property which have been**

insufficiently assessed, the resulting loss in tourism revenue, and the availability of viable alternative alignments that would not cut through the property.

3.1.2. State 3 proposed China-India Trade Link

With the adoption of the new Constitution of Nepal on 20 September 2015, it is anticipated that the country will be divided into seven federal provinces, or States, which are numbered 1 through 7 pending agreement on their new names (figure 2). The property is located in Chitwan District and Nawalparasi District, which are part of State 3 and State 4, respectively.



Figure 2: Map of the seven new States of Nepal, following the adoption of the new Constitution of Nepal on 20 September 2015. Source: <http://kathmandupost.ekantipur.com/news/2015-09-05/the-7-state-model.html>.

In their pursuit of economic development, several States are proposing to establish trade links between China and India. The proposal by State 3 is for a road to run from Kerung in the northeast of the country, through Narayanghad and Bharatpur to Thori and on to India. This alignment would follow the existing gravel road through the property between Kasara and Madi Valley. The mission considers that this proposed trade link, which appears to be in the very early stages of conceptualisation, would be likely to result in a significant increase in traffic, particularly of heavy vehicles, passing through the property both by day and during the night. This would pose an unacceptable risk to the property and its wildlife. The mission notes that plans to develop a fast track between Kathmandu and Birgunj appear to offer a more economically viable alternative that would enable State 3 to benefit from a trade link between China and India without negatively impacting on the property.

It should be noted that as with the Terai Hulaki Highway, the local community at Thori was found to not be in favour of a China-India trade link running through their community.

The mission recommends that the State Party:

- **Not approve the State 3 proposed China-India Trade Link through the property, considering that alternative alignments are available in State 3 for a China-India Trade Link that could be developed without negatively impacting on the property, in particular in view of plans to develop a Kathmandu-Birgunj fast track.**

3.1.3. Bharatpur-Thori

The proposed road development between Bharatpur and Thori does not represent a new development, but an upgrade of an existing road. This existing road passes through the property at two locations, i.e. from north to south between Kasara and Bankatta, and along the southern boundary of the property from Bagai to Dipaknagar. This road is of significant importance to the communities in the Madi Valley, as it enables them to access crucial education and health facilities, the nearest of which are located in Bharatpur. When asked about their priorities for development opportunities, the representatives of the Thori community noted that improved access to Bharatpur is more important to them than the establishment of a health centre in the Madi Valley, as they perceived that without a good connection to Bharatpur, no doctor would be willing to stay in the Madi Valley.

The mission was able to travel the entire length of this road. The quality of the road between Bharatpur and Kasara is excellent, consisting of smooth tarmac wide enough for two vehicles to pass each other with ease. Within the property between Kasara and Bankatta, the mission found the gravel road to be in good practicable condition, again wide enough for two vehicles to pass each other with ease. This part of the road is well maintained and is open for public use from 6:00 o'clock in the morning to 22:00 o'clock at night. Where the road passes through the property along its southern border, it is also a gravel road and albeit in a slightly poorer condition, it remains well practicable. However, the quality of the parts of the road that run through the Madi Valley outside the property was found to be quite poor.

In view of the importance of the Bharatpur-Thori road to provide access to crucial educational and health facilities to the communities in the Madi Valley, the mission recommends that the State Party:

- **Upgrade parts of the Bharatpur-Thori road that are located outside the property in order to improve access to educational, health, and other facilities to the communities in the Madi Valley, while ensuring that any upgrading or widening of those parts of the road that are located inside the property shall not be permitted, maintaining current restrictions on the use of the road between 22:00 o'clock and 6:00 o'clock, and that the road will not be used as a thoroughfare, especially for the transportation of commercial goods to destinations beyond Thori.**

3.1.4. Dumkibas-Triveni

This proposed road starts in Triveni and runs for 18 kilometres through the property (following an existing footpath) along the west bank of the Narayani river, to Dumkibas where it connects to the existing East-West Highway. This road has been requested by the Triveni community for the past 20 years, and is backed by influential community members. The perceived benefit is that by connecting to the existing road outside the property that leads from Triveni to the East-West Highway, Triveni would no longer be located in a cul-de-sac and could therefore benefit from development opportunities associated with traffic transiting through the area. The mission visited Triveni, and notes that the existing road outside the property is in very good condition. Therefore, access from Triveni to Dumkibas is considered to already be very good. It should also be noted that Triveni is the gateway to important religious sites at Gajendra Dham and Balmiki Ashram (see below), which receive pilgrims from all over Nepal and from India. Hence the fact that it is located in a cul-de-sac is not likely to be a limiting factor to development. The mission also questions the likelihood that creating an additional connection to Dumkibas would increase transit traffic through Triveni, as any traffic with a different destination than Triveni would be likely to stay on the East-West Highway, rather than making the detour. Thus, the mission considers that the likely negative impacts from this road on the OUV of the property would far outweigh its perceived benefits.

It should be noted that the representatives from the Triveni community, including an influential businessman who strongly supports the road, maintained that its proposed alignment would not cut through the property. In their understanding, the boundary of the property follows the west bank of the Narayani River, shifting accordingly with fluctuating water levels. This lack of awareness of where the boundary of the property actually is is also at the basis of misunderstandings around the legality of developments at Gajendra Dham, and should be addressed by demarcating the boundary on the ground. This issue is discussed in more detail in the discussion on Gajendra Dham below (section 3.5).

3.1.5. State 4 proposed China-India Trade Link

There is little official information available on the status and plans of the State 4 proposed China-India Trade Link. However, the mission was informed that its proposed alignment between Dumkibas and Triveni would be identical to that of the Dumkibas-Triveni road discussed in the previous section. Hence the same concerns about potential negative impacts on the OUV of the property apply, with the added concern that as a Trade Link it would be likely to generate a significant amount of heavy traffic. The mission considers that the existing road from the East-West Highway to Triveni could provide a viable, less damaging alternative to enable State 4 to benefit from a Trade Link between China and India, without crossing through the property.

The mission recommends that the State Party:

- **Not approve the proposed Dumkibas-Triveni road and the State 4 proposed China-India Trade Link through the property, in view of the existing road outside the property which provides adequate access to Triveni, and which could provide a**

viable, less environmentally damaging alternative to enable State 4 to benefit from a trade link between China and India.

3.1.6. Madi-Balmiki Ashram

During a meeting with the National Park Authority, the mission was informed that a road has been proposed to connect Madi Valley to the pilgrimage site at Balmiki Ashram. The mission was unable to obtain any clarity about who is proposing this road, but was informed that local communities, as well as local political parties are opposed to its development. Given that it would pass through the property along the entire length of its boundary where it coincides with the international border with India, it would be likely to cause significant negative impacts on the OUV of the property, including through a loss of connectivity between the property and the Valmiki Tiger Reserve in India.

The mission recommends that the State Party:

- **Not approve the proposed road from Madi to Balmiki Ashram through the property, in view of its potential impacts on the Outstanding Universal Value of the property, including through loss of connectivity with the Valmiki Tiger Reserve in India.**

3.1.7. Malekhu-Thori

The mission was informed that there is an interest from certain parties to re-open an ancient trade route between Thori and Malekhu, and on to Kerung. It is unclear who these parties are, but from discussions held between the mission and the representatives of the Thori community, it was evident that this community's main priority is increased access to Bharatpur, and a road through the property directly to Malekhu is not considered to cater to their development needs. If built, this road would cut through the property from south to north along 40 kilometres of an existing footpath, close to its eastern boundary with Parsa Wildlife Reserve. As such, the mission considers that it would be likely to have a significant negative impact on the OUV of the property, including through the loss of connectivity with Parsa Wildlife Reserve. In that regard the mission notes that the wild elephant population in the property mostly consists of visiting males from Parsa Wildlife Reserve, hence the loss of connectivity that could result from the construction of a road from Thori to Malekhu could have a significant impact on elephant movements between Parsa Wildlife Reserve and the property.

The mission recommends that the State Party:

- **Not approve the proposed road from Thori to Malekhu through the property, given its potential impacts on the OUV of the property, including through loss of connectivity with Parsa Wildlife Reserve, particularly in view of elephant movements between Parsa Wildlife Reserve and the property.**

3.1.8. Thori-Birgunj

The Department of Roads of Nepal informed the mission that there are plans for the construction of a Postal Highway from Thori to Birgunj (figure 3). Construction of this road started three years ago, and three to four bridges have already been built, including in the buffer zone of the property. Although this road would not cross the property, its potential indirect impacts on its OUV should nevertheless be assessed, including the potential for this connection to cause the existing Bharatpur-Thori road to become a thoroughfare for the transport of commercial goods, and to increase the demand for a China-India trade link through the property. It should be noted that the Department of Roads has only undertaken Initial Environmental Evaluations (IEE) for this proposed road, as it stated that it was previously unaware that proposed developments that could impact on a National Park require a full Environmental Impact Assessment (EIA) by Nepalese Law. Work on this road is currently put on hold, pending completion of a full EIA.

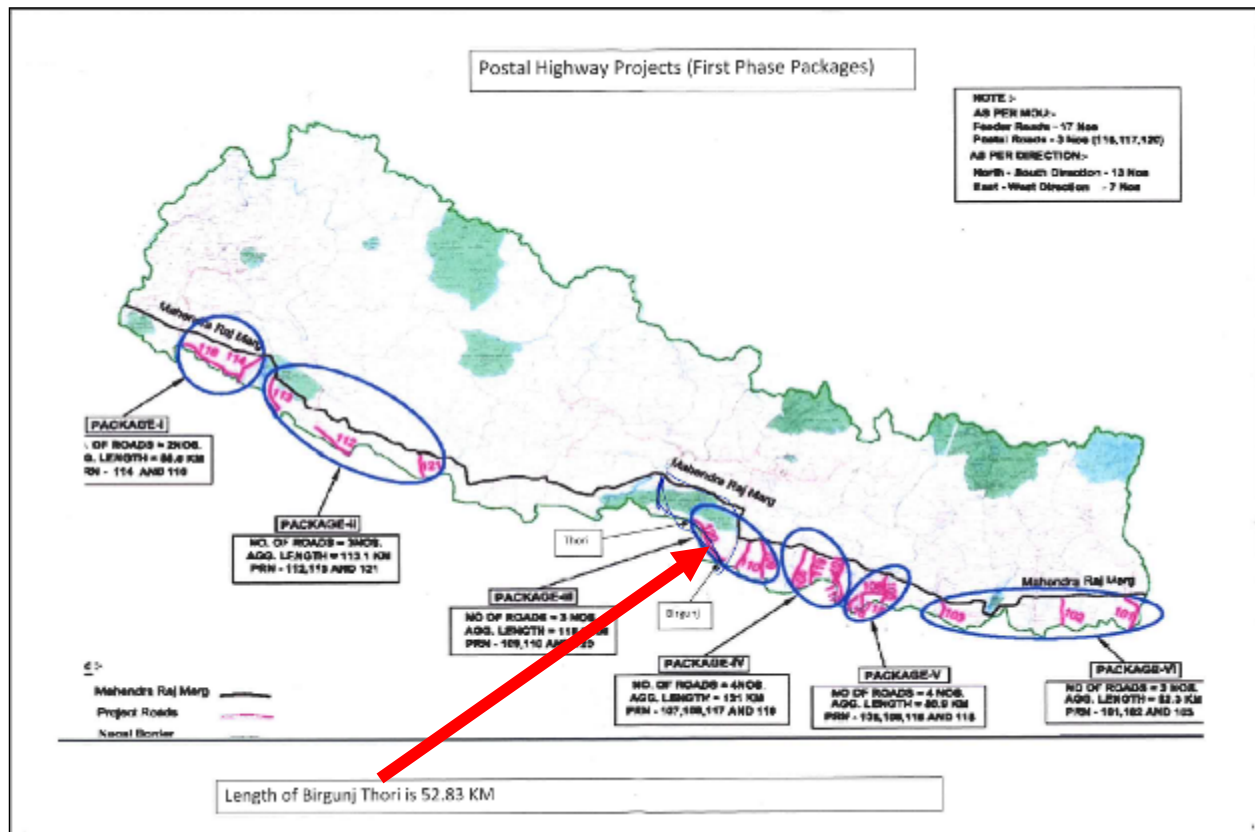


Figure 3: Map of Postal Highway Projects in Nepal. The thick red arrow indicates the Thori-Birgunj road south of the property.
 Source: Department of Roads of Nepal

The mission recommends that the State Party:

- Ensure that the proposed road from Thori to Birgunj is subject to a thorough Environmental Impact Assessment (EIA) in accordance with applicable laws, including in relation to the potential for this road to increase the demand for transportation of commercial goods through the Madi Valley and the property, and

including a specific assessment of potential direct, indirect and cumulative impacts on the Outstanding Universal Value of the property in line with IUCN's World Heritage Advice Note on Environmental Assessment¹.

3.2. East-West Electric Railway

During the mission's briefing meeting with government representatives in Kathmandu prior to its field visit, it was informed by the DPNWC and the Department of Roads that a decision was made that the East-West Electric Railway, which was proposed to go through the property, would be diverted. The mission was at that moment unsuccessful in arranging a meeting with the Department of Railways. However, when discussing this project during a meeting in Sauraha, park staff, including the Chief Conservation Officer noted that no official communication had been given about such a decision.

On 21 March 2016, after returning from its field visit, the mission was able to meet with representatives of the Department of Railways to discuss this project. In 2010, the Government of Nepal decided to undertake a feasibility study for a railway running from the east to the west of the country. Currently, a Detailed Project Report (DPR) has already been carried out, and the alignment of the railway west of Tamsariya and east of Simara has already been decided on. No decision has yet been made on the preferred alignment of the Tamsariya-Simara section, where the property is located. Given difficulties to establish a rail connection between Hetauda and Simara due to the gradient of the terrain, initial proposals were made for an alignment that would cross the property, with different alternatives being proposed as depicted in figure 4 below.

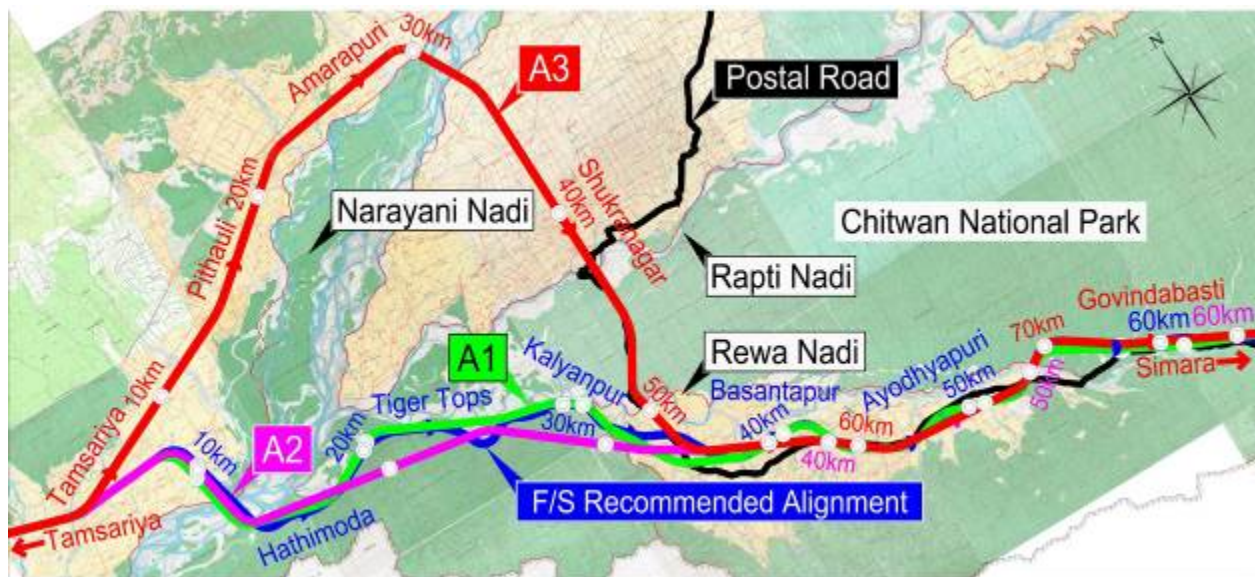


Figure 4: Alternative alignments of Section A of the East-West Electric Railway, where it passes through Chitwan National Park. Source: Chitwan National Park Office, 2016: presentation given to the mission.

¹ https://cmsdata.iucn.org/downloads/iucn_advice_note_environmental_assessment_18_11_13_iucn_template.pdf

The F/S Recommended Alignment and the A1 alternative alignment would both pass through the hilly Tiger Tops area, and would require embankment to prevent the river flooding the railway, as well as cutting of trees. Alternative alignment A2 attempts to avoid impacts on wildlife by constructing tunnels and bridges. Alternative alignment A3 would avoid the Tiger Tops area, but would still cross the property over the Narayani River and between kilometres 40 and 50 (roughly along the route of the Kasara-Bankatta existing gravel road). All these alignments also cross the property along part of its southern boundary in the same place as the existing gravel road, as can be seen in figure 5 below. The Department of Railways indicated to the mission that if the railway would pass through the property, it would prefer the construction of an elevated railway as opposed to a tunnel in order to not obstruct wildlife movement, and every necessary step would be taken to avoid and mitigate any impacts. However, an EIA has not yet been conducted.

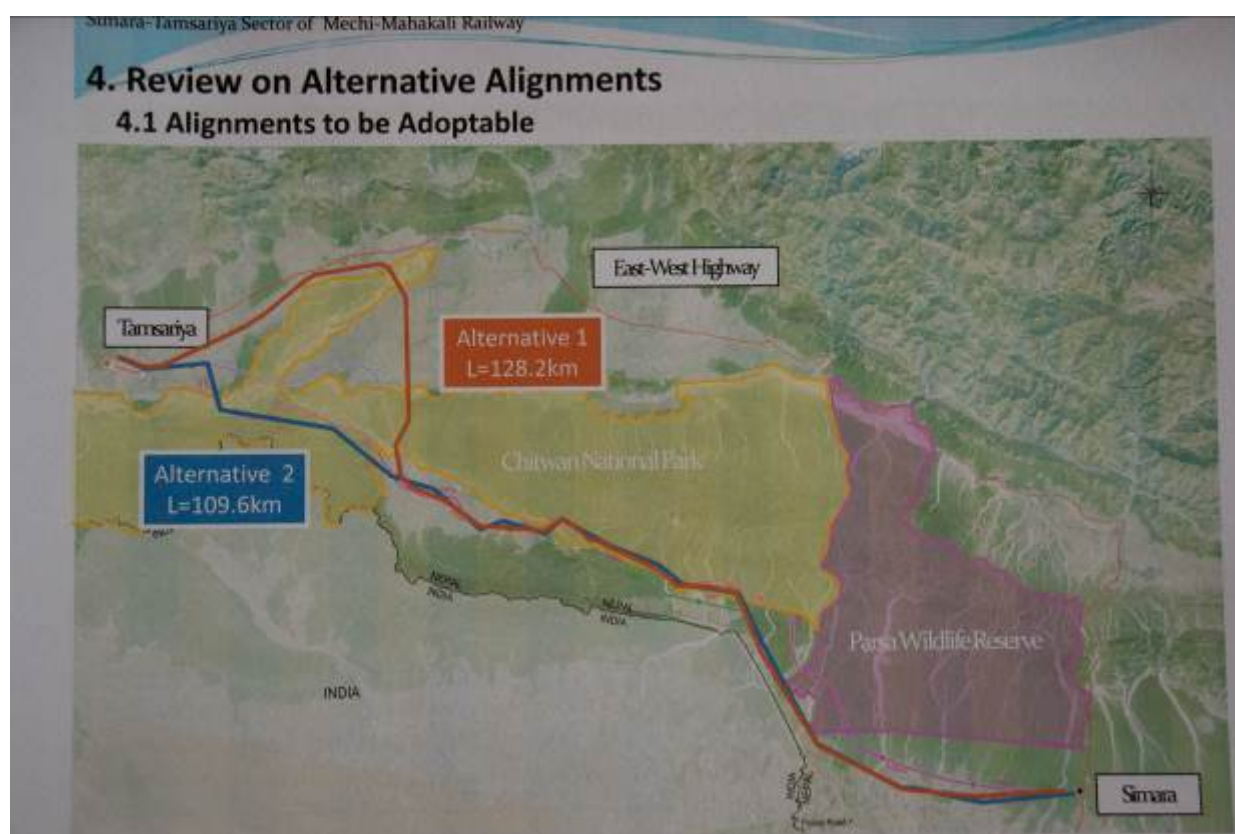


Figure 5: Alternative alignments of the East-West Electric Railway in relation to Chitwan National Park and Parsa Wildlife Reserve. Source: photo of a document shown by the Department of Railways during a discussion with the mission on 21 March 2016

The Department of Railways also indicated to the mission that it now considered an alignment through the property to be a last resort. It noted that in response to requests made by the Ministry of Forest and Soil Conservation (MoFSC) a feasibility study for an alternative route that would avoid the property (figure 6) is currently ongoing, and expected to be completed within six months (around September-October 2016). Based on the outcome of this study, a decision will be made as to which alternative route should be subject to an EIA. Hence, it was made very clear by the Department of Railways that two alternative alignments are still being considered,

i.e. one that avoids the property and another that crosses through the property as originally foreseen.

Nevertheless, the Department of Railways noted that the inception report on the alternative alignment outside the property is positive, and confirmed to the mission its commitment to avoid the property if it is technically feasible to do so. It stated to the mission that cost would not be a factor in the decision-making on the alignment of this section of the railway.

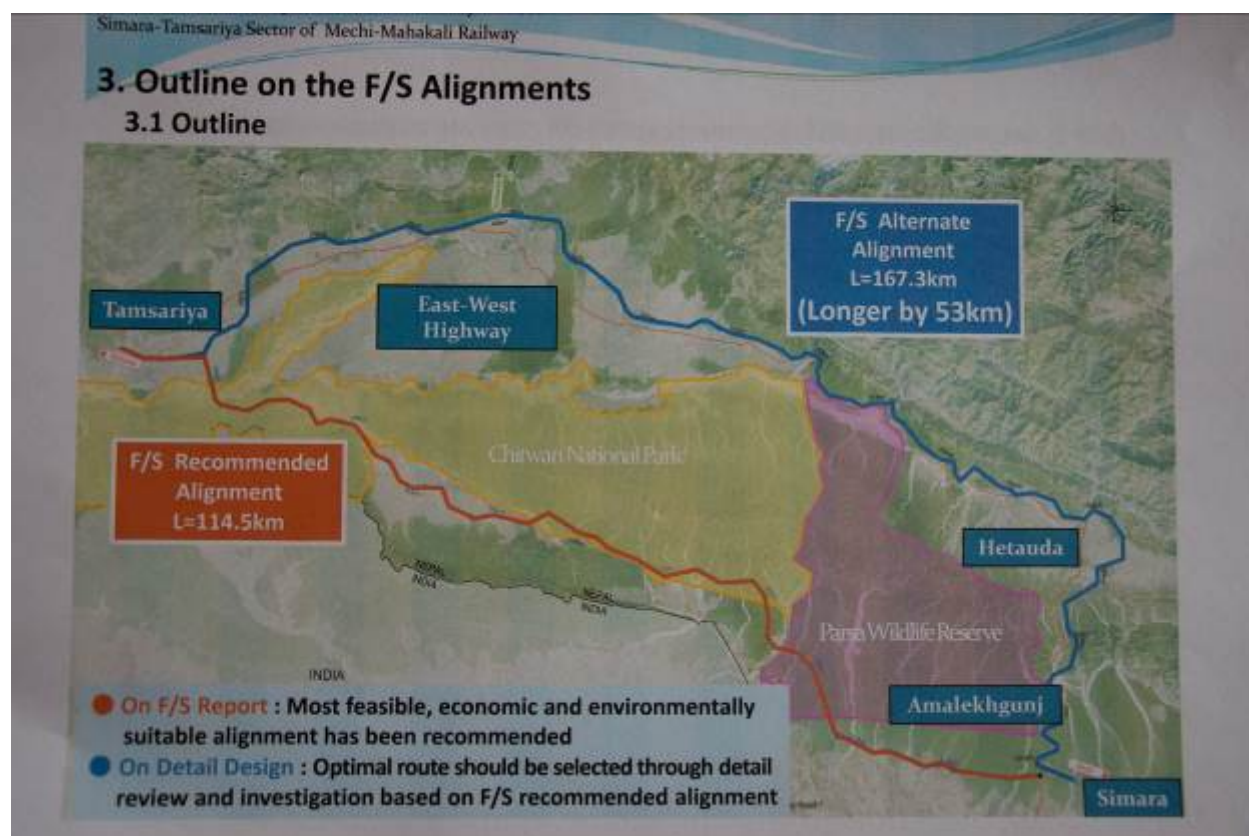


Figure 6: Alternative alignments of the East-West Electric Railway currently under consideration. *Source: photo of a document shown by the Department of Railways during a discussion with the mission on 21 March 2016*

The mission concurs with the statement made by the Department of Railways that the East-West Electric Railway has to be sustainable, both from an environmental and an economic point of view. In that regard, it notes that if the railway was constructed along the alternative alignment that completely avoids the property, it would service more significant economic centres, including Narayanghad/Bharatpur and Hetauda, which would be bypassed if the railway were to be constructed through the property and the Madi Valley. Hence from an economic point of view, the mission considers that the alternative alignment that avoids the property would be more sustainable, as the long-term benefits derived from providing railway access to these economically important cities would be likely to outweigh the additional short-term construction costs associated with this alignment.

The mission considers that if the railway would be constructed through the property, it would be likely to have significant negative impacts on its OUV, and would represent a clear basis for the inscription of the property on the List of World Heritage in Danger, in accordance with

Paragraph 180 of the *Operational Guidelines*. Hence, the mission recommends that the State Party:

- **Make a firm commitment to the conservation of the property by making a decision to not approve the construction of the East-West Electric Railway along its proposed alignment through the property, and instead to divert the railway around the property, regardless of the additional construction costs that would be incurred in the short term, as these would likely be outweighed by the long-term economic benefits of establishing a rail connection to the economically important cities of Narayanghad/Bharatpur and Hetauda.**

3.3. Optical fibre project

The mission met with representatives from Nepal Telecom, the company that is proposing to lay an optical fibre through the property to provide improved communication services to the villages in the Madi Valley. Meetings were held both in Kathmandu and in the field with local representatives of the company, who provided further clarifications on the proposed location of the optical fibre and the construction work involved.

On 28 September 2015, the State Party submitted a copy of the EIA for the optical fibre project to the World Heritage Centre for review by IUCN. As this reactive monitoring mission was being planned at the time and anticipated to visit the property in December 2015, IUCN considered that a review of the EIA would be most appropriately carried out by the mission. Regrettably, the mission had to be postponed due to political unrest in Nepal. Consequently the review of the EIA was delayed until the mission was able to visit the property in March 2016.

The EIA recognizes that Chitwan National Park is a World Heritage Site inscribed, among others, for its biodiversity conservation values. However, no specific assessment of impacts on OUV is undertaken, as required by the IUCN World Heritage Advice Note on Environmental Assessment. Nevertheless, the EIA does assess impacts on the biological environment, noting in particular that a total of 14,160 seedlings and saplings will be uprooted and removed, and that 160 trees, including Sal (*Shorea robusta*), would also be directly or indirectly affected. In that regard it should be noted that the Statement of Outstanding Universal Value of the property makes a specific reference to Sal trees, noting that the property constitutes the largest and least disturbed example of Sal forest and associated communities. Disturbance to wildlife movement and an increase in illegal hunting and poaching by construction workers are also identified in the EIA as potential adverse impacts.

The mission discussed these potential impacts and the proposed mitigation measures with Nepal Telecom representatives. Proposed mitigation measures include:

- the development of a nursery to raise seedlings for replanting;
- planting 25 saplings/trees for every sapling/tree lost;
- planting 4000 seedlings of preferred species, including Teak and Sal;
- limiting the number of construction workers that will be allowed inside the property, and working only during day-time hours;
- an awareness-raising programme for construction workers.

In addition, the mission was informed that the flexibility of the optical fibre cable would enable adjustments to its alignment in order to minimize impact on trees and poles (poles being trees up to 30 cm in diameter).

In conclusion, the mission considers that the optical fibre project may have some negative impacts on the OUV of the property, but that these impacts will mostly be local and temporary in nature, and that they can be minimized through the implementation of appropriate avoidance and mitigation measures.

The mission recommends that the State Party:

- **Ensure, in collaboration with Nepal Telecom and the Chitwan National Park Office, the implementation of adequate measures to avoid and mitigate any impacts on the Outstanding Universal Value of the property that could result from the construction of the Optical Fibre between Kasara and Bankatta.**

3.4. Trivenidham-Balmiki Ashram Suspension Bridge

Chitwan National Park and its buffer zone are home to a number of spiritually significant sites, which are regularly visited by pilgrims. One such spiritual site is located at Balmiki Ashram inside the property. Access to this site currently requires pilgrims to cross the Narayani River by boat from Triveni (Trivenidham). The mission was informed that accidents happen, and pilgrims are known to have lost their lives in the crossing.

In order to improve accessibility to Balmiki Ashram, and in response to requests from local communities, the Government of Nepal has proposed the construction of a suspension bridge at Trivenidham. The eastern end of the proposed bridge would be permanently located inside the property, while the western end, being located on the western bank of the Narayani River, may be seasonally located inside the property as the boundary fluctuates according to the water level. The Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR), which is responsible for the construction of the suspension bridge, did not yet undertake an EIA for this project, despite its location inside the property. Two Initial Environmental Evaluations (IEE) were conducted in 2010 and in 2014. The mission was informed that on the basis of the 2014 IEE, the then Chief Conservation Officer of Chitwan National Park requested that DoLIDAR implement 12 mitigation measures, for which DoLIDAR has set aside the required budget. However, a subsequent Cabinet decision requires DoLIDAR to take all environmental measures, given the location of the project inside a National Park and a World Heritage property, which according to Nepalese law requires that a full EIA is conducted. However, DoLIDAR maintains that it has never received a written request to undertake an EIA. It has stated its willingness to undertake an EIA under the condition that construction can be started simultaneously. In the meantime, no progress has been made with the EIA, and the project is at a standstill. The mission notes that no construction should be allowed to take place while the EIA is pending or ongoing.

Having visited the proposed location of the suspension bridge, the mission notes that a new foot trail will also need to be established in difficult terrain between the eastern end of the bridge and

the pilgrimage site at Balmiki Ashram. Any impacts from this foot trail should also be assessed in the EIA for the bridge.

The mission recommends that the State Party:

- **Ensure that an EIA for the proposed Trivenidham-Balmiki Ashram Suspension Bridge and its associated foot trail through the property is conducted in accordance with applicable laws and prior to starting any construction work, including an assessment of impacts on the Outstanding Universal Value of the property, in line with IUCN's World Heritage Advice Note on Environmental Assessment.**

3.5. Gajendra Dham

One of the key issues which the mission looked at is the reported encroachment and establishment of a temple and a boarding school at Gajendra Dham within the core area of Chitwan National Park, and hence inside the property. Gajendra Dham is believed to be the location where Lord Vishnu saved an elephant from a crocodile, and has been a religious site for centuries. However, the temple and other facilities were built in the past 15 years, and the construction of a very large new temple is well advanced, but currently put on hold pending an ongoing legal investigation. None of the developments at Gajendra Dham, which are supported by the same politically powerful person who is also promoting the construction of the Dumkibas-Triveni road (see section 3.1.4.), have been subject to an EIA, and all were constructed without the approval of the Chief Conservation Officer of Chitwan National Park.

The mission visited the site and interacted with park officials, local villagers and management authorities of Gajendra Dham. Based on the information obtained, the mission is of the view that the facilities at Gajendra Dham are likely to be mostly located in the buffer zone of Chitwan National Park, outside the property, while 10.06 ha overlap with the property. The mission considers that the spiritual significance of this site, which receives pilgrims from all over Nepal and from India, cannot be ignored. Nevertheless, its location on the boundary of a World Heritage Site requires that any activities carried out at Gajendra Dham take into account the environmental sensitivity of the site, and care should be taken to avoid and mitigate any negative impacts. For example, the mission noted a large amount of garbage in the area of Gajendra Dham that is located inside the property. Noting that the national park authority has already established a ranger post at Gajendra Dham, the mission suggests that a joint management approach should be considered, including an appropriate zonation scheme which sets aside areas for spiritual practices and areas for nature conservation.

The mission recommends that the State Party:

- **In collaboration with the Chitwan National Park Office and the responsible authorities at Gajendra Dham, develop a management plan for Gajendra Dham which should include:**
 - a) **An appropriate zonation scheme to set aside areas for spiritual practices and for nature conservation;**

- b) Appropriate limits on any further construction of facilities, beyond the normal maintenance works;**
- c) Adequate measures to minimize impacts from the large number of pilgrims visiting the site annually, including a waste management plan and provisions to allow only daytime ritual activities under the observation of the Chitwan National Park Office.**

The mission further notes that there is significant confusion with regards to the boundary of the core area of Chitwan National Park, and hence the property. The understanding among local communities is that the boundary of the property follows the western bank of the Narayani River. However, while this is true for the area south of Triveni until the Indian border, at Gajendra Dham the boundary moves away from the river to include a significant portion of land further west. A lack of understanding of where the boundary is exactly located is no doubt contributing much to current misunderstandings of the location of the facilities at Gajendra Dham within the property or its buffer zone. As noted above, this situation is also leading to confusion regarding the location of the proposed Dumkibas-Triveni road, which local communities believe is located outside the property. Hence, the mission considers that there is an urgent need to clearly demarcate the boundary of the property on the ground.

The mission recommends that the State Party:

- Clearly demarcate on the ground the entire boundary of the property, giving priority to known areas of conflict or confusion, including the entire area west of the Narayani River.**

3.6. Poaching

The mission was tasked to assess impacts from illegal activities, including encroachment at Gajendra Dham (see above) and poaching. With regards to poaching, the mission notes that the property has achieved three recent years of zero poaching (2011, 2013 and 2015). In its Decision **39 COM 7B.15**, the Committee requested the State Party of Nepal *“to provide an update on the status of poaching of rhino and other wildlife inside the property, in order to demonstrate the continued success of anti-poaching operations”*. The mission was able to confirm that anti-poaching efforts have continued to be successful. Contrary to concerns that anti-poaching efforts might have suffered due to a supposed redeployment of armed forces to support vital reconstruction activities following the devastating earthquake that hit Nepal in April 2015, the mission was informed that instead, additional armed forces were provided to Chitwan to support conservation activities. The mission therefore considers that at present, and thanks to the laudable efforts by park rangers and armed forces, poaching does not appear to represent a significant threat to the property’s OUV.

The mission recommends that the State Party:

- Maintain current anti-poaching efforts in collaboration with the Nepal Army, in order to ensure the continued success of anti-poaching operations.**

Other issues

3.7. Human-Wildlife Conflict and encroachment in the buffer zone

From discussions with local communities in Thori, the mission notes that human-wildlife conflict around the property is a growing concern (indeed, the major concern raised by local community representatives), which causes crop damage and loss of life (both human and wildlife). Species most commonly involved in human-wildlife conflict are wild boar, chital, monkeys, elephant, tiger and bear. The black top road on the Indian side near Thori has reportedly led to elephants entering human settlement areas in South Chitwan causing more crop damage and loss of human life. Due to the same road development, wild animals including wild boar and chital are reported to be entering human areas and causing extensive damage to crops in Southern Chitwan. Human-wildlife conflict may be further aggravated if road or railway projects are allowed to proceed, which would result in increased disturbance to wildlife through habitat loss and fragmentation.

Increasing human-wildlife conflict could trigger renewed animosity towards the national park by local communities. Since most of the villagers are agriculture dependent, mitigation of human wildlife conflict is very much essential to maintain a good relationship between Chitwan National Park officials and local villagers.

Representatives from the local community at Thori suggested that the increasing human-wildlife conflict may be a result of inappropriate (and illegal) settlements within areas of the buffer zone that contain important wildlife habitat. The suggestion was made to the mission that some of these villages should be resettled in an effort to reduce human-wildlife conflict. Three settlements in particular are considered to encroach on important wildlife habitat, i.e. Ichhanagar (50-70 households), Sikaribas (70-75 households), both of which occupy significant wetland areas, and Bandarjhula (550-570 households) which occupies prime lowland forest habitat. The mission visited the settlement at Bandarjhula where severe habitat degradation is evident. The mission noted that development aid appears to be provided to this community without any consultation with the Chitwan National Park Office, as exemplified by a number of churches and schools and a medical centre which were built with the support of the Government of Nepal and international organisations, including the Red Cross, the World Health Organization, and UNICEF.

The mission recommends that the State Party:

- **Coordinate with the Chitwan National Park Office, the Department of National Parks and Wildlife Conservation and other relevant government institutions, local communities, NGOs and international organisations to seek appropriate solutions to address encroachment of important wildlife habitats in the buffer zone of the property and to rehabilitate encroached areas, in order to ensure the conservation of wildlife corridors and to reduce human-wildlife conflict.**

3.8. Flood control dyke

The mission was informed that a dyke has been constructed on the northern bank of the Rapti River outside the property, which appears to be causing changes in normal flood patterns and thereby causing changes in grassland and wetland habitat leading to lateral movement of rhinos from east to west Chitwan. This view was opined at the meeting and interactions held with local NGOs of Nepal in Kathmandu. Due to time constraints, the mission was unable to verify this information in the field. However, rhino distribution data from 2013 presented to the mission by the Chitwan National Park Office (figure 7) appear to support this observation.

The mission recommends that the State Party:

- **Investigate the impacts from the recent construction of flood control dykes on the northern bank of the Rapti River outside the property, and ensure that any proposed construction of flood control dykes is subject to a full EIA, including a specific assessment of impacts on the Outstanding Universal Value of the property.**

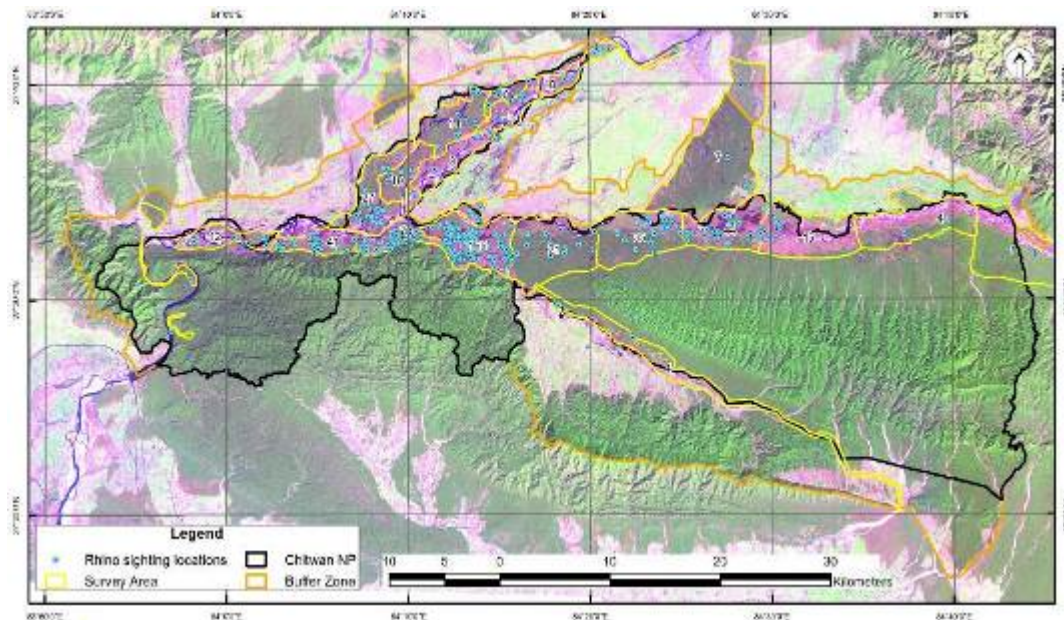


Figure 7: Rhino distribution data, 2013. *Source: Powerpoint presentation provided to the mission by the Chitwan National Park Office, March 2016.*

3.9. Irrigation dam

The mission was further informed that an irrigation dam on the Narayani River in India appears to be affecting the normal movement patterns of Gangetic River Dolphin and Gharial. Again, the mission was unable to verify this in the field and no supporting data were provided.

The mission recommends that the State Party:

- **Monitor populations of Gangetic River Dolphin and Gharial and their movements, in order to assess how these species may be affected by dams on the Narayani**

River downstream of the property, and to identify measures to ensure their conservation.

4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

The state of conservation of the property remains good. Populations of Rhino and Tiger are increasing, and there is a successful Gharial breeding programme at Park headquarters in Kasara. Nevertheless, concerns exist in relation to impacts on Gangetic River Dolphin and Gharial, including as a result of fragmentation of migration corridors due to dams and pollution. Invasive species are also a concern both in wetland (particularly Water Hyacinth – *Eichhornia crassipes*) and grassland habitats (particularly *Mikania micrantha*). Grasslands are a significant value of the property and provide conducive habitat to Greater One-horned Rhino and many other herbivores. The conservationists whom the mission met opined that about 20-25% of the property is affected by invasive species, thereby reducing the optimum grassland habitat for Greater One-horned Rhino and other grassland species. The property's estimated carrying capacity for Rhino is about 800. As such, the increasing trend of invasives like *Mikania* and other species could severely impact the overall carrying capacity for rhinos unless some measures are initiated to control their spread.

In addition, rhino habitat in the east of the property is reported to be changing to less favourable conditions due to the construction of a flood control dyke on the north bank of the Rapti River, which appears to be causing rhinos to move further west in search of more suitable habitat (see section 3.8 above).

The overall management of the property was found satisfactory and besides the efforts of Chitwan park staff, the Nepal Army has been playing a remarkable role in the protection of the property, in particular in anti-poaching efforts. The fact that even during the ongoing relief aid and rehabilitation work for areas affected by the April 2015 earthquake in Nepal, the Nepal army has never withdrawn its troops from the property and has instead dispatched additional troops to Chitwan, demonstrates the continued commitment of the Nepal Army and the Government of Nepal to the conservation of the property.

5. CONCLUSIONS AND RECOMMENDATIONS

The mission concludes that the state of conservation of the property remains good thanks to effective management by the Chitwan National Park Office and successful anti-poaching operations with the support of the Nepal Army. Nevertheless, the property's Outstanding Universal Value is threatened by a number of ongoing issues and threats from new development proposals. The most significant ongoing issues relate to the spread of invasive species, in particular *Eichhornia crassipes* in wetland habitats and *Mikania micrantha* in grassland habitats, and to the increasing problem of human-wildlife conflict. Current management efforts are already addressing these issues, as laid out in the 2013-2017 Management Plan for Chitwan National Park and its buffer zone. Overall, the communities living around the property are very much supportive of its conservation, and the relationship between local communities and the Chitwan National Park Office appears to be satisfactory. However, the mission makes a recommendation (see below) for additional measures that should be taken to further address and attempt to reduce human-wildlife conflict.

The mission did neither assess the severity of invasion by alien species nor the effectiveness of the current management response, therefore no recommendation for additional management action is being made. Nevertheless, it is clear that invasive species require continued vigilance and preventive action, as well as targeted eradication activities, in order to ensure that the quality of the property's habitats remains high and able to support the wide range of species that depend on them.

The various new development proposals discussed above could have significant direct, indirect, and/or cumulative impacts on the OUV of the property. Of particular concern are the proposed East-West Electric Railway, the Terai-Hulaki Highway, and other proposed road developments. The mission concludes that if any of these proposed transport infrastructure developments were to proceed according to their planned alignment through the property, they would be a clear basis for the inscription of the property on the List of World Heritage in Danger, in accordance with Paragraph 180 of the *Operational Guidelines*.

Recalling the recommendations made by the 2002 IUCN monitoring mission for the State Party to:

- b. *“Give a commitment that the road, which is actually a right of way for the Madi Valley residents, will not be used as a thoroughfare, especially for transportation of commercial goods to destinations beyond Madi.*

[...]

- k. *Give a commitment not to demand opening of the internal park road (that goes close to the Tamor Tal) as an alternative to the link road at any time in the future.*
- l. *Give the commitment not to upgrade the status of the existing public ROW, which is a Hulaki road (postal road) to any higher status, such as a highway or others that would enable it to be metalled.*
- m. *Regulate the times of operation of traffic passing over the Kasra Bridge and the ROW between sunrise and sunset or at certain hours of the day only, enforce strictly the 40 km speed limit, and also consider limiting the number of vehicles that could pass through during the course of a day. The condition to limit the operation time and the flow of traffic should not be rescinded in the face of public or political pressure in future, as was done in the case of the national highway that passes through the Royal Bardia National Park [...].*

[...]”

the mission recommends that the State Party:

- R1. Improve communication and coordination between different government institutions and ministries in order to increase awareness about the World Heritage status of Nepal's World Heritage properties, including Chitwan**

National Park, and the legal requirements that need to be adhered to in case of development proposals that may impact on their Outstanding Universal Value;

- R2. Upgrade parts of the Bharatpur-Thori road that are located outside the property in order to improve access to educational, health, and other facilities to the communities in the Madi Valley, while ensuring that any upgrading or widening of those parts of the road that are located inside the property shall not be permitted, maintaining current restrictions on the use of the road between 22:00 o'clock and 6:00 o'clock, and that the road will not be used as a thoroughfare, especially for transportation of commercial goods to destinations beyond Thori;
- R14. Make a commitment to not approve any other current or future proposed roads through the property, including:
- a. the Terai Hulaki Highway,
 - b. the State 3 and State 4 proposed China-India Trade Links,
 - c. the Dumkibas-Triveni road,
 - d. the Madi-Balmiki Ashram road, and
 - e. the Thori-Malekhu road,

given their likely significant negative impacts on the Outstanding Universal Value of the property, the potential loss in tourism revenue, and the availability of viable alternative alignments that would not cut through the property, and taking into account the specific recommendations made in this report for each of these roads;

- R3. Ensure that the proposed road from Thori to Birgunj is subject to a thorough Environmental Impact Assessment (EIA) in accordance with applicable laws, including in relation to the potential for this road to increase the demand for transport of commercial goods through the Madi Valley and the property, and including a specific assessment of potential direct, indirect and cumulative impacts on the Outstanding Universal Value of the property in line with IUCN's World Heritage Advice Note on Environmental Assessment;
- R4. Make a firm commitment to the conservation of the property by making a decision to not approve the construction of the East-West Electric Railway along its proposed alignment through the property, and instead to divert the railway around the property, regardless of the additional construction costs that would be incurred in the short term, as these would likely be outweighed by the long-term economic benefits of establishing a rail connection to the economically important cities of Narayanghad/Bharatpur and Hetauda;
- R5. Ensure, in collaboration with Nepal Telecom and the Chitwan National Park Office, the implementation of adequate measures to avoid and mitigate any

impacts on the Outstanding Universal Value of the property that could result from the construction of the Optical Fibre between Kasara and Bankatta;

- R6. Ensure that an EIA for the proposed Trivenidham-Balmiki Ashram Suspension Bridge and its associated foot trail through the property is conducted in accordance with applicable laws and prior to starting any construction work, including an assessment of impacts on the Outstanding Universal Value of the property, in line with IUCN's World Heritage Advice Note on Environmental Assessment;
- R7. In collaboration with the Chitwan National Park Office and the responsible authorities at Gajendra Dham, develop a management plan for Gajendra Dham which should include:
 - a. An appropriate zonation scheme to set aside areas for spiritual purposes and for nature conservation;
 - b. Appropriate limits on any further construction of facilities, beyond the normal maintenance works;
 - c. Adequate measures to minimize impacts from the large number of pilgrims visiting the site annually, including a waste management plan and provisions to allow only daytime ritual activities under the observation of the Chitwan National Park Office;
- R8. Clearly demarcate on the ground the entire boundary of the property, giving priority to known areas of conflict or confusion, including the entire area west of the Narayani River;
- R9. Maintain current anti-poaching efforts in collaboration with the Nepal Army, in order to ensure the continued success of anti-poaching operations;
- R10. Coordinate with the Chitwan National Park Office, the Department of National Parks and Wildlife Conservation and other relevant government institutions, local communities, NGOs and international organisations to seek appropriate solutions to address encroachment of important wildlife habitats in the buffer zone of the property and to rehabilitate encroached areas, in order to ensure the conservation of wildlife corridors and to reduce human-wildlife conflict;
- R11. Investigate the impacts from the recent construction of flood control dykes on the northern bank of the Rapti River outside the property, and ensure that any proposed construction of flood control dykes is subject to a full EIA, including a specific assessment of impacts on the Outstanding Universal Value of the property;
- R12. Monitor populations and movements of Gangetic River Dolphin and Gharial in order to assess how these species may be affected by the irrigation dam on the Narayani River downstream of the property, and to identify measures to ensure their conservation.

ANNEXES

Annex I – Terms of Reference

IUCN Reactive Monitoring Mission Chitwan National Park (Nepal)

14-21 March 2016

At its 39th session, the World Heritage Committee requested the State Party of Nepal to invite a reactive monitoring mission to Chitwan National Park World Heritage property, to be conducted by IUCN (Decision **39 COM 7B.15**, Annex Ia). The objective of the monitoring mission is to review potential impacts from various developments (see below) on Outstanding Universal Value (OUV), and to provide advice on alternative options for infrastructure development that would not have a negative impact on OUV. The mission will be led by Dr. Bibhab Kumar Talukdar and Mr. Remco van Merm, representing IUCN.

In particular, the mission should undertake the following:

1. Review potential impacts on the property's Outstanding Universal Value from the following developments:
 - a. The proposed East-West Electric Railway
 - b. The Terai Hulaki Highway/Hulaki Sadak postal road and related bridges;
 - c. The proposed Balmikiashram-Trivenidham Suspension Bridge;
 - d. The optic fibre project crossing the property;
 - e. Any other proposed infrastructure developments that could impact on the property, including the China-India trade links, as reported by the 16-19 June 2015 UNESCO/IUCN Fact Finding Mission;
2. Assess the current state of conservation of the property, in particular in relation to impacts from illegal activities, in particular encroachment (including at Gajendra Dham) and poaching (taking note that there have recently been three years of zero rhino poaching);
3. In line with paragraph 173 of the *Operational Guidelines*, assess any other relevant conservation issues that may negatively impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management.

The State Party should facilitate necessary field visits to key locations. In order to enable preparation for the mission, it would be appreciated if the following items could be provided to the World Heritage Centre (copied to IUCN) as soon as possible and preferably no later than 1 month prior to the mission:

- a) The (draft) Environmental Impacts Assessments (EIA) of the abovementioned proposed developments;
- b) Detailed planning documentation, including maps, of the abovementioned proposed developments;
- c) Reports of the monitoring and surveillance of the property, including time series figures on wildlife populations and illegal activities;
- d) The management plan of the property.

The mission should also hold consultations with the Nepalese authorities at national, provincial and municipal levels, in particular the Ministry of Forests and Soil Conservation, the Ministry of Physical Infrastructure and Transport, the Ministry of Culture, Tourism and Civil Aviation, and the Ministry of Federal Affairs and Local Development. In addition, the mission should hold consultation with a range of relevant stakeholders, including i) scientists and researchers; ii) NGOs; iii) representatives of local communities; and iv) religious leaders.

Based on the results of the above-mentioned assessments and discussions with the State Party representatives and stakeholders, the mission will develop recommendations to the Government of Nepal and the World Heritage Committee with the objective of providing guidance to the State Party for actions to be taken to address identified threats to the property, and to improve the conservation of its Outstanding Universal Value. This should include advice on alternative options for infrastructure development that would not have a negative impact on OUV. It should be noted that recommendations will be provided within the mission report (see below), and not during the mission implementation.

The mission will prepare a concise report on the findings and recommendations within six weeks following the site visit, following the World Heritage Centre reactive monitoring mission report format.

Annex Ia

Decision: 39 COM 7B.15

The World Heritage Committee,

1. Having examined Document WHC-15/39.COM/7B.Add,
2. Recalling Decision **38 COM 7B.69**, adopted at its 38th session (Doha, 2014),
3. Notes with significant concern that the proposed East-West Electric Railway and Terai-Hulaki Highway, if constructed, would result in the fragmentation of the property in four locations, all of which contain important habitat for key species, including elephant, rhino, tiger and gaur, and increase the risk of poaching;
4. Requests the State Party to undertake an Environmental Impact Assessment (EIA) for the proposed Suspension Bridge (Balmikiashram-Trivenidham), and submit the EIAs for the East-West Electric Railway, the Tarai Hulaki Highway and the optical fibre project crossing the property to the World Heritage Centre, for review by IUCN, ensuring that the EIAs include a specific assessment of the impacts on the Outstanding Universal Value (OUV) of the property, as well as an assessment of cumulative impacts and alternative alignments that do not cross the property, as recognised under all its inscription criteria in conformity with IUCN's World Heritage Advice Note on Environmental Assessment;
5. Also requests the State Party to submit these EIAs and further details on the proposed projects to the World Heritage Centre, for review by IUCN, in accordance with Paragraph 172 of the *Operational Guidelines*, and to ensure that no construction of infrastructure will be permitted if it could negatively impact on the OUV of the property;
6. Recalling the two recent years of zero rhino poaching in the property (2011 and 2013), further requests the State Party to provide an update on the status of poaching of rhino and other wildlife inside the property, in order to demonstrate the continued success of anti-poaching operations;
7. Requests furthermore the State Party to invite an IUCN Reactive Monitoring mission to the property, in order to review potential impacts from the abovementioned developments on its OUV, and to provide advice on alternative options for infrastructure development that would not have a negative impact on OUV;
8. Requests moreover the State Party to submit to the World Heritage Centre, by **1 December 2016**, an updated report, including a 1-page executive summary, on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 41st session in 2017.

Annex II – Mission itinerary and programme

Draft 29 February 2015



Provisional Programme for **IUCN Reactive Monitoring Mission** Chitwan National Park 13-21 March 2016

Mission Members (Kathmandu and Chitwan)

1	Mr Remco van Merm	World Heritage Conservation Officer, World Heritage Programme IUCN Headquarters	Foreigner
2	Dr Bibhab Kumar Talukdar	Chair of the IUCN Species Survival Commission's Asian Rhino Specialist Group	Indian
3	Dr Yam Malla	Representative of IUCN Nepal	Nepalese
4	Ms Leire Beltran	UNESCO Kathmandu	Foreigner
5	Dhan Bahadur	UNESCO Driver	Nepalese

Mission members in Chitwan National Park

6	Mr Ram Chandra Kandel	Chief Conservation Officer of Chitwan National Park will join the team in Sauraha
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Date	Suggested Time	Program	Responsibility
Sunday 13 March 2016		Arrival of Mr Remco van Merm	Pick up from the airport by UNESCO vehicle
		Arrival of Dr Bibhab Kumar Talukdar	
	Overnight: The Yellow House B&B P.O. Box 4384, Sanepa, Lalitpur, Nepal. Phone: +977-1-555-3869 Contact person: Govinda Gurung Cost: US\$40.00 +10% Service Charge +13% VAT including breakfast with 10% Discount (per night)		Laura has booked two single rooms
Monday 14 March 2016	09:30	Meeting at UNESCO Office Mr Christian Manhart, Mrs Nipuna Shrestha, Mr Remco van Merm, Dr Bibhab Kumar Talukdar and Dr Malla	Coordinated by UNESCO
	11:00	Briefing Meeting at Ministry of Forest and Soil Conservation (MoFSC) <ul style="list-style-type: none"> - Presentation on Protected Areas in Nepal by Dr Maheshwar Dhakal, Under-Secretary of DNPWC - Presentation on World Heritage Convention and IUCN's role by Mr Remco van Merm <p>Suggested participants, among others</p> <ol style="list-style-type: none"> 1. Secretary of the MoFSC 2. Director General of DNPWC 3. UNESCO Representative to Nepal 4. IUCN Country Representative and Senior Advisor 	
	To be confirmed	Meeting with Department of Local Infrastructure and Agricultural Roads <ul style="list-style-type: none"> - Topic of Discussion: Trail suspension bridge 	
		Overnight: The Yellow House B&B	

Tuesday 15 March 2016	To be confirmed	Meeting at with local NGOs based in Kathmandu Venue: UNESCO Office in Sanepa <ul style="list-style-type: none"> - WWF Nepal: Mr Shiv Raj Bhatta, Programs Director and former Chief Conservation Officer of Chitwan NP; Mr Christy Williams, WWF Rhino Specialist - IUCN Dr Malla - NTNC - Wildlife Conservation Nepal (Prasanna Yonzon, CEO, prasanna@wcn.org.np) - Wildlife Watch Group (Mr. Mangal Man Sakhya, wwg@citesnepal.org) - Bird Conservation Nepal 	Coordinated by DNPWC (Dr Maheshwar Dhakal)
	To be confirmed	Meeting with Department of Roads and Department of Railways at Ministry of Physical Infrastructure & Transport <ul style="list-style-type: none"> - Topic of Discussion: Terai Hulaki Highway and other road construction plans in and around Chitwan NP - Topic of Discussion: East West Electric Railway 	Coordinated by DNPWC (Dr Maheshwar Dhakal)
	Overnight: The Yellow House B&B		Laura has booked two single rooms
Wednesday 16 March 2016	To be confirmed	Meeting with Ministry of Information and Communications and Nepal Telecom, and Ministry of Culture, Tourism and Civil Aviation Venue: DNPWC Office in Babarmahal or at one of the Ministries <ul style="list-style-type: none"> - Topic of discussion: Gajendra Dham temple - the Optical Fiber Network project from Narayani Municipality to Madi municipality crossing CNP 	Coordinated by DNPWC (Dr Maheshwar Dhakal)
	13:00	Departure to Chitwan (Sauraha) from UNESCO Office in Sanepa	
	18:00	Arrival to Sauraha followed by dinner	
	Overnight: Hotel Parkside, Sauraha Cost: US\$35, including dinner and breakfast		UNESCO will book
Thursday 17 March 2016	09:00	Meeting at National Trust for Nature Conservation offices in Sauraha (similar meeting to June meeting with representatives of tourism industry and NGOs) <ul style="list-style-type: none"> - Local WWF representative - Local IUCN representative - Tourism business representatives 	Coordinated by CNP (Mr Ram Chandra Kandel)

		Presentation on the objectives of the mission, and IUCN and UNESCO collaboration by Remco Van Merm <i>UNESCO vehicles will be driven to Hotel Tigerland via Bharatpur, there is no bridge access to the park from Sauraha</i>	
	12:00	Crossing the river on a canoe and then drive in Park Vehicle to the Park HQ	Coordinated by CNP(Mr Ram Chandra Kandel)
	13:30	Lunch at Park HQ in Kasara	Coordinated by CNP(Mr Ram Chandra Kandel)
	14:30	Meeting with Park staff at Park HQ in Kasara Presentation on the objectives of the mission, and IUCN and UNESCO collaboration by Remco Van Merm	Coordinated by CNP(Mr Ram Chandra Kandel)
	17:30	Arrival at Hotel Tigerland, followed refreshment and dinner at the hotel	
	Overnight: Hotel Tigerland , Jagatpur. Telephone: +9779801173127/+977056695633 Cost: US\$55, including dinner and breakfast		Booked by UNESCO office
Friday 18 March 2016		Breakfast	
	08:00	Departure to Chitwan Park HQ in Kasara where the team will meet with the park management	Coordinated by CNP(Mr Ram Chandra Kandel)
	08:30-11:00	Drive from HQ to Thori crossing CNP from north to south along the gravel road where Terai Hulaki Highway is planned to be built. NEA Jagatpur-Madi 33KV electricity line was also built along the road and Optical Fiber Network will also have the same alignment.	Coordinated by CNP
	11:00-12:00	Meeting with community members in Thori	Coordinated by CNP
	12:00-13:00	Lunch at Thori	Coordinated by CNP
	13:00-15:00	Field visit outside of Thori to see the starting point of the railway and recently built bridges along the planned Terai Hulaki Highway	Coordinated by CNP

	15:00	Departure from Thori to the Hotel	
	18:00	Arrival at hotel followed by refreshments and dinner	
	Overnight: Hotel Tigerland , Jagatpur. Telephone: +9779801173127/+977056695633		Booked by UNESCO office
Saturday 19 March 2016		Breakfast at the Hotel	
	08:00-10:30	Drive from Kasara to Triveni	
	10:30-12:00	Site Visit to the Trail Suspension Bridge building site and crossing of the river by boat to see the Park side of the bridge construction	Coordinated by CNP
	12:00-13:00	Meeting with local communities and Department of Local Infrastructure and Agricultural Roads; Suspension Bridge Division Trivenidham	
	13:00-14:00	Lunch at Trivenidham	Coordinated by CNP
	14:00-15:00	Site visit to the temple in the Gajendra Dham, located in the Park core area, which was built without an EIA and without the permission of the MoFSC and DNPWC	Coordinated by CNP
	15:00-17:00	Drive from Triveni to Bharatpur via along the planned railway and highway line	
	18:00	Arrival at hotel Bharatpur, followed by refreshments and dinner	
	Overnight: Hotel Global in Bharatpur Cost: US\$35, including dinner and breakfast		Booked by UNESCO office
Sunday 20 March 2016		Breakfast	
	08:00	Departure to Kathmandu Lunch along the way to Kathmandu	
	13:00	Arrival to Kathmandu	
	15:00	Debriefing meeting at the Ministry of Forest and Soil Conservation	Coordinated by DNPWC (Dr Maheshwar Dhakal)
	Overnight: The Yellow House B&B in Kathmandu		Booked by UNESCO office
Monday 21 March 2016		Option to have additional morning meetings in Kathmandu, if needed (meeting with Department of Railways)	
		IUCN Experts depart	

Annex III – Lists and contact details of people met

Kindly Check Spelling /Number of your contact List

S.N.	Name	Organization	email	Phone
1	Panindra Raj Kharel	DNPWC	pkharel@gmail.com	9802039215
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6	Nipuna Shrestha (Singh)	UNESCO Kathmandu	n.nipuna@unesco.org	9851131752
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15	Remco van Merm	IUCN World Heritage Programme	remco.vanmerm@iucn.org	+91229990110


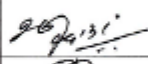



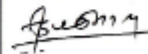

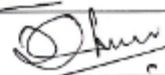
NGOs Consultation on Chitwan National Park
16 March 2016
UNESCO Office, Sanepa
Registration Sheet

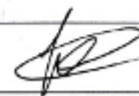
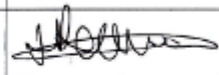


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10	Kamal Jung Kunwar	SNMP/CCO	Kamalkunwar@hotmail.com	9751070355	

IUCN Reactive Monitoring Mission
Meeting with representatives of tourism industry and NGOs
17 March 2016
Registration Sheet

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13	Ram Prasad Rijal	Travellers J. com	Travellers Jungle camp@gmail.com	985505545	
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S.N	Name	Designation/Organisation	E-mail	Contact number	Signature
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21	Bashudev Rijal	RA-NA-PA. Chitwan	hitalb.132@gmail.com	9855062355	
22	Yam Malla	IUCN Nepal	yam.malla@iucn.org	9857126373	
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29	B.P. Chudhary	Basavaras Com. f. forest		9855066704	
30	Ram mani khanel	General secretary RHAN.	RKH.vic.com	9845117371	
31	Purushottam Pandey	Chitwan National Park	pandey.purushottam@yahoo.com	9804076040	

NAME	ORGANIZATION	EMAIL	TELEPHONE	SIGNATURE
Ram Chandra Kandel	Chitwan National Park (Chief)			
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Jivraj Gautam	C.N.P.			
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IUCN Reactive Monitoring Mission
Meeting with community members in Thori
18 March 2016 14:00
Registration Sheet

S.N	Full Name	Designation/Organisation	E-mail	Contact Number	Signature
1	डॉ. प्रकाश खन्ना	काठमाडौं, नेपाल		97701998869	
2	सूर्य बहादुर लामा	सी प्रोबल रोड 3/10, २०८५		9809141099	
3	नेत्र बहादुर थापा	- " - " -		9812259596	
4	शम्भु बहादुर कलेज	- " - " -		9772221682	
5	बल बहादुर श्रेष्ठ	सी प्रोबल रोड 3/10, २०८५		9772293777	
6	दिलिप ठेके थापा	सी प्रोबल रोड 3/10, २०८५		9771722982	
7	दिलिप थापा (विद्यार्थी)	- " - " -		9772206582	दिलिप थापा
8	पिताम्बा खिलवाल	CAPBU -		9	
9	शोभा खान सिद्ध	सी प्रोबल रोड 3/10, २०८५		9772225526	शोभा खान सिद्ध
10	रमण विक्रम निरहारी	सी प्रोबल रोड 3/10, २०८५		9772225526	रमण विक्रम निरहारी
11	विष्णु विक्रम	सी प्रोबल रोड 3/10, २०८५		9772226626	
12	बालु खिलवाल	सी प्रोबल रोड 3/10, २०८५		9770920922	
13	रोहित थापा	सी प्रोबल रोड 3/10, २०८५		9772202238	

- 1. सुर्य बहादुर (थपा) सी प्रोबल रोड 3/10, २०८५ - 97701998869
- 2. अजय खिलवाल सी प्रोबल रोड 3/10, २०८५ - 9772225526
- 3. नेत्र बहादुर (थपा) सी प्रोबल रोड 3/10, २०८५ - 9771722982
- 7. Ram Chandra Kandel, chief warden, CND
- 8. Abhinaya Pathak, Asst. Warden, CND - 9846360373
- 9. Leire Bectran - UNESCO - 9818209444
- 10. Ramco van Meer - IUCN HQ - +41 789272232
- 11. Yash Malhi - IUCN Nepal 9851136373
- 12. Bibhob Taluadra - IUCN - AIRG +91 9437131379

IUCN Reactive Monitoring Mission
Meeting with local communities in Trivenidham
19 March 2016 / 11:30
Registration Sheet

S.N	Full Name	Designation/Organisation	E-mail	Contact Number	Signature
1	Dr. Prasad Bhandari	V. D. C. 5	—	9857013404	
2	Nurendra Aryal	Conservation Officer	nurendaryal@gmail.com	9857038522	
3	Cakman Gaudan	Triveni V. D. C. 3		9857028260	
4	Motilal Upadhyay	Trivenisusta-VDC-5		9857013790	
5	Sunaj Kumar Khar	RRT Member Trivenisusta		9857085065	
6	Teknarayan Upadhyay	Part chairperson Trivenisusta VDC 4		9857080160	
7	Buddhisagar Upadhyay	social worker 4		9867472065	
8	Krishna Sharma	presiden (Gajendra M.D)		9857020981	
9	Krishna prapancharya	Gajendra M.D. Ghan		9847022088	
10	Ganesh Chhetri	Social worker		9857022255	
11	Bhaskar Prasad Sharma	"		9867300093	
12	Prithvi Bahadur Gurung	Trivenisusta VDC 2		9848256613	
13	Bibi Bahadur Singh	Trivenisusta VDC 2	bedhya26@yahoo.com	9869179296	

Full Name	ORGANIZATION	EMAIL	PHONE	SIGNATURE
14. Manju Kumari Rana	Triveni user committee	—	9857020533	
15. Keshab K.C. Gaudan	Triveni Susta - 3	k_26349@yahoo.com	9867178104	
16. Ram Prasad Subedi	chitwan n.p. waggalaha		9802950261	
17. Bhim Bahadur	—		9845139456	
18. Prakash Bista	UNESCO	e.bethan-susta@unesc.org	9868632329	
19. Leila BERTAN		015	9817209444	
20. Bibhav Kumar Bhandari	IUCN-ASIAN RHINO SPECIALIST GROUP	bskathinos@gmail.com	+91-9435113139	
21. Yam Malla	IUCN Nepal	yam.malla@iucn.org	9857136373	
22. Remo van Merm	IUCN - HQ	remo.vanmerm@iucn.org	+41783272782	

Annex V – Photographs



© IUCN/Remco van Merm. Dhruba guard post with a view on the existing gravel road through the property from Kasara to Bankatta, which is in good practicable condition.



© IUCN/Remco van Merm. The road from Thori to Bharatpur is in poor condition in many areas (outside the property).



© IUCN/Remco van Merm. The road connecting Triveni to the existing East-West Highway is in excellent condition, and could provide a viable alternative for developing the Dumkibas-Triveni road and the State 4 proposed China-India Trade Link without the need to cut through the property.



© IUCN/Remco van Merm. The mission discussing the Optical Fibre Project with a representative from Nepal Telecom.



© IUCN/Remco van Merm. Proposed site for the eastern end of the Trivenidham-Balmiki Ashram Suspension Bridge (inside the property).



© IUCN/Remco van Merm. Temple at Gajendra Dham, most likely located in the buffer zone of the property.



© IUCN/Remco van Merm. The construction of a large new temple at Gajendra Dham has been put on hold pending a legal investigation.



© IUCN/Bibhab Kumar Talukdar. The mission verifying the boundary of the property at Gajendra Dham.



© IUCN/Remco van Merm. The settlement of Bandarjhula in the buffer zone of the property is encroaching on important wildlife habitat and causing severe habitat degradation.



© IUCN/Bibhab Kumar Talukdar. Development aid is being provided to the community at Bandarjhula, without prior consultation with the Chitwan National Park Office.



© IUCN/Remco van Merm. Gharial (*Gavialis gangeticus*, CR) at the gharial breeding centre at Kasara.



© IUCN/Bibhab Kumar Talukdar. Blue peafowl (*Pavo cristatus*, LC)



© IUCN/Remco van Merm. Wild boar (*Sus scrofa*, LC) and red-wattled lapwing (*Vanellus indicus*, LC)



© IUCN/Remco van Merm. Greater one-horned rhinoceros (*Rhinoceros unicornis*, VU).



© IUCN/Remco van Merm. Man-eating tiger (*Panthera tigris tigris*, EN) held in captivity at park headquarters at Kasara.



© IUCN/Remco van Merm. Sunset in Chitwan National Park.



© IUCN/Remco van Merm. Greater one-horned rhinoceros (*Rhinoceros unicornis*, VU).