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Khangchendzonga National Park, Sikkim: India's new UNESCO World Heritage Site!

Khangchendzonga National Park (previously named Kanchenjunga National Park) also *Kanchenjunga Biosphere Reserve* is a National Park and a Biosphere reserve located in Sikkim, India. It was inscribed to the UNESCO World Heritage Sites list on July 17, 2016, becoming the first "Mixed Heritage" site of India. The Khangchendzonga National Park, a lesser-known destination in Sikkim, has been declared as a World Heritage Site by UNESCO. The 40th World Heritage Committee at Istanbul, Turkey has inscribed Khangchendzonga National Park of Sikkim, India as a UNESCO's World Heritage Site on 'Mixed' criteria recognising the outstanding universal values for its both natural and cultural significance. Located at the heart of the Himalayan range in Sikkim, the Park is home to dozens of lofty mountain peaks, 18 glaciers, lakes, waterfalls and some unique flora and fauna. A favourite among trekkers, this place has a unique biodiversity that includes an interesting mix of wildlife species and the presence of plains, valleys,

lakes, glaciers and spectacular, snow-capped mountains covered with ancient forests, including the world's third highest peak, Mount Khangchendzonga.

Besides, the National Park is highly regarded by the state's local population because of several mythological stories that are associated with the caves, rivers, lakes, forests and other natural elements in this place. The park gets its name from the mountain Kanchenjunga (alternative spelling Khangchendzonga) which is 8,586 metres (28,169 ft) tall, the third-highest peak in the world. The total area of this park is 849.5 km² (328.0 sq mi). There are many glaciers in the park including the Zemu glacier. Animals like *musk deer*, *snow leopard* and *Himalayan tahr* all make their home in this park.

The UNESCO designation not only adds

prestige to the park, but also entitles it to financing from the World Heritage Fund.

"The UNESCO recognition will give a further push to eco-tourism in our state, while also helping us to regulate the high influx of visitors to more popular destinations with only a minimal negative impact of tourism," said Hon'ble Sikkim Chief Minister Pawan Kumar Chamling.



View of the Mighty Khangchendzonga from a camping site.

KNP's Rich Biodiversity

● Flora:

The area of the Park broadly comes under Champion and Seth's

classification type. Sub-Group IIB Northern Mantane Temperate Forests: and Group 12- Himalayan Moist Temperate Forest: Sub-Alpine Scrub Forest, alpine Scrubs and Pastures. Thus, the flora of the Park can be broadly subdivided into three forest Zones:

1. Temperate Broad-leaved forest (1,829-2,730 mts) dominated by *Quercus Lineata*, *Quercus Lamellosa*, *Quercus Pachyphylla*, *Schima Wallichii*, *Castanopsis* species, *Acer Campbellii*, *Engelhardtia*, *Juglans regia*, *Michelia cathcartii*, *Magnolia Campbellii* and *Cinnamomum Obtusifolium*.

2. Mixed Coniferous Forest (2,730 3,650 mts) dominated by fir, *Abies densa*, *Acer* species, Spruce, *Picea mrrindoides* and Junipers (Juniperous species) with associates of taller varieties of Rhododendrons and Bamboo (*Arundinaira* species)

3. Alpine Scrub and Grass (above 3,650 mts) dominated by common shrubs and herbs like *Meconopsis* species, *Primula* species, Prostrating Junipers, *Iris* *Gentiana*, *Anemone* and *Delphinium*. Besides, there are many medicinal herbs too- like *Aconitum* species, *Picrorhiza*, *Orchis latifolia*, *Nardostachys jamtamsi*, *Rheum emodi* and *Panax pseudogingseng*.

● Fauna:

The Khangchendzonga (High Altitude) National Park is a reservoir of diverse habitats- including some rare and endangered species like the Snow Leopard, Himalayan Red Panda (Sikkim's State Animal), Musk Deer, Nayan or the Great Tibetan Sheep. Bharal or the Blue Sheep, Himalayan Tahr (Shaipii), Common Leopard, Goral, Serow, Barking Deer, Lesser Cats, Wild Dogs, Tibetan Wolf, Mountain Fox, Tibetan Fox, Himalayan Black Bear, Marmots Monkeys and many Rodent species. A recent study revealed that the *Asiatic wild dog* has

become very rare in the area. The wild dogs in the Khangchendzonga Biosphere Reserve are believed to belong to the rare and genetically distinct subspecies *C. a. primaevus*.

The Park is rich in bird-life with around 550 species and sub-species like the flamboyant high- altitude Pheasants which include Monal Pheasants, Tragopan pheasants and Blood Pheasants (the State Bird); Tibetan snow Cock; Himalayan Snow Cock, Snow Partridge, Hill Partridge, Lammergeyer, Forest Eagle-Owl, Tibetan Horned Eagle-Owl; Eagles; Falcons; Hawks; and Snow & Rock Pigeons. Most of these birds are physically adopted for high mountain climate conditions and come down to lower elevations during winter when the upper reaches are covered with snow.



THE KHANGCHENDZONGA BIOSPHERE RESERVE:

Khangchendzonga Biosphere Reserve (KBR) with an area of 2,931.12 Km² represents a land area which upholds the Trans-Himalayan biota in the eastern part of Hindukush Himalayas. The chain of the Great Himalayan Mountain begins from Afghanistan and as it proceeds eastwards to include the Highest Peak of the World, the Mount Everest, the Khangchendzonga Mountain Range, the third highest peak of the World commences immediately after the Everest Range and forms the major portion of the Khangchendzonga Biosphere Reserve (KBR).

KBR is endowed with one of the highest eco-systems in the world and it covers varying eco-clines from sub-tropical to arctic, vast land of natural forests in different biomes from 1220m to over 8586m above sea level. The vegetation

mainly comprises of East Himalayan Sub-tropical Broad-leaf Hill Forest, East Himalayan Moist Temperate Forest, East Himalayan Mixed Coniferous Forest, East Himalayan Sub-Alpine Birch/Fir/Rhododendron Forest, Moist Alpine Scrub Forest and Alpine Pastures.

KBR includes areas of high religious significance that some of the Mountains/ Peaks, Lakes, Caves, Rocks, Stupas (Shrines) and Hot-Springs are sacred and pilgrimage sites. The State Government of Sikkim has banned scaling of sacred peaks and also defilement of sacred caves, sacred rocks, sacred lakes, stupas and sacred hot-springs.

Spiritual Aspect

The National Park has a deep seated religious sentiment in connection with the people of Sikkim. They believe in the holy spirits that are living in the forests, lakes and caves of this vast area and so it is easy to conserve and protect the

animals and plants of the region. Regions of Sikkim that comes under its territory include Yuksom, Gurudongmar, Muguthang, Lachen, Thangu, Chopta valley, upper ridges of Dzongu and Green Lake. Some of the important religious natural elements located inside the park are Gurudongmar Lake, one of the holiest lakes in North Sikkim. There are also four holy caves located at different location of the park area. They are said to possess a lot of power and it is believed that whoever visits all four of them is bound to experience profound spiritual cleansing. Sikkim is presented in Buddhism as a "hidden land" and as per scriptures, what now constitutes the park is the sanctum sanctorum, where religious masters have hidden religious texts and treatises marked for discovery in later times.

The name of Khangchendzonga means 'The Great Snowy Repository of Five

Treasures' (from Tibetan gangs: snow, chen: great, mdzod: treasure, lnga: five).

Dzonga, Sikkim's guardian deity resides on Mt. Khangchendzonga from where, sitting like a king on a throne, he presides over the *beyul* as the owner and protector of the land, its people and natural resources.

The five peaks of Mt. Khangchendzonga are considered as repository of five treasures: i) salt ii) gold and turquoise, iii) Buddhist scriptures iv) arms v) medicines and seeds. It is believed that these treasures will be made available to the Sikkimese people in times of need.

The Kanchendzonga National Park is also home to many Glaciers. Some of the important glaciers located here are:

1. Zemu Glacier (26km long and 300km wide, one of the largest in Asia)
2. Rathong Glacier
3. Tongshiong Glacier
4. Talung Glacier
5. Tent Peak Glacier

Park specific activities

Trekking is one of the most widely chosen activities in the park. Besides there are other activities which can be taken up by tourists visiting the heritage site like Bird watching, camping, wilderness photography etc. The National park is also open to various media activities like Film making, shooting documentaries and video logs but there is a nominal fees which has to be paid to the authorities.

Trekking- Most of the trekking routes

starts from Yuksom (145 km (90 mi) from Gangtok) in West Sikkim. Necessary Permit can be obtained from the *Wildlife Education and Interpretation center* at Yuksom or from the check post. State Tourism Department along with other travel agents organize treks to Dzongri (4,050 metres (13,290 ft)) and other places. The popular trek routes are:

- Yuksom - Tshoka Dzongri
- Bakim - Dzongri - Thangshing - Samuteng Goechala
- Dzongri Base Camp - Rathong Khangerteng
- Thangshing - Lam Pokhari - Kasturi Orar - Labdang not ladang - Tashiding.



Another popular trekking point includes trekking to the **Green Lake** via Lachen, a village in North Sikkim as the starting point. Foreign nationals would require a restricted area permit from the Ministry of Home Affairs, Government of India, Delhi to visit the park and the associated region. Indian nationals are required to obtain an

Inner-Line Permit from the State Home Department. Permission of the State Chief Wildlife Warden is also mandatory for everybody visiting the park. The important and popular routes are:

- Lucanes Jakchen-Yabuk-Rest Camp (Marco Polo Camp) - Green Lake
- Lachen-Thasngu (13,695 feet (4,174 m)) - Muguthang (16,000 feet (4,900 m)) - Thay La (17,000 feet (5,200 m)) - Khyoksa La (18,000 feet (5,500 m)) - Rest Camp - Green Lake.

Most of these trekking routes pass through the Kanchenjunga National Park.



Chirim Ritual held by the bongthing (shaman) of Payel village, Dzongu

Permissions & Fees in the Park

In accordance with the provisions of the Wildlife (Protection) Act, 1972, and the Wildlife Rules made thereon, the Chief Wildlife Warden, Government of Sikkim grants permission to visitors intending to visit the Khangchendzonga National Park for the purpose of photography, scientific research, tourism, transaction of lawful business and studying wildlife on payment of the following prescribed fees.

1. ENTRY FEE :

- Indian Nationals
 - I. 350/- per head for the first 7 days.
 - II. 40/- per head -per day for additional days.
- Foreigners
 - I. 560/- per head for the first 7 days.

- II. 80/- per head -per day for additional days.
- Students (Indian Nationals)
 - I. 80/- per head for the first 7 days
 - II. 20/- per head -per day for additional days.
- Local Guides and Porters with the Team 10/- per head per day
- Pack Animals 15/- per animal per day
- Tent Pitching Charge 50/- per tent per day
- Bed Charges in Log Hut 100/- per bed per day
- 2. CAMERA-OPERATING FEE:
 - ➔ Still Camera 30/-
 - ➔ Video Camera 1000/-
 - ➔ Movie Camera 35000/-
- 3. FILM-MAKING FEE:
 - Feature Film 70,000/- (Foreigners) 35,000/- (Indians) (One film at a time)
 - Documentary film 36,000/- (Foreigners) 24,000/- (Indians) (One film at a time)

Expedition to High Altitude Peaks For scaling & climbing of peaks permission is to be accorded from Government of Sikkim through Tourism & Civil Aviation Department and Home Department.

Regulations:

DONT's: The parties shall not

- (a) Use firewood or kindle fire in wildlife and forest areas.
- (b) Damage or cut shrubs or thickets.
- (c) Pollute water body.
- (d) Collect plants or their parts.
- (e) Be accompanied by stray dogs or pet animals.
- (f) Feed, shout, tease, chase, disturb or molest wild animals.
- (g) Play loud music or use loud speakers.
- (h) Camp outside designated campsites.
- (i) Trek outside designated nature trails.

- (j) Defecate within 100 meters of any water body.
- (k) Camp within 500 meters of the periphery of any lake.
- (l) Cause environmental pollution.
- (m) Defile sites of religious and cultural significances such as sacred mountains, lakes, rocks, caves and shrines.
- (n) Commit any other act that may be injurious to forests, water bodies, plants, animals or disturb the natural tranquility of such sites or become a nuisance to fellow trekkers.
- (o) Leave any non-biodegradable materials in wildlife area during a trek, and such materials shall be declared at the forest/ wildlife check-post both before and after the trek.
- (p) Sell liquor, drugs and other intoxicants within a wildlife area.
- (q) Carry out any research or study within a wildlife area without the prior permission of the Government.
- (r) Indulge in hunting of any wild animals or carry on the business of buying & selling any animals, animal, article, antique cultural artifacts, trophy, uncured trophy or meat of wild animals and specified plants.
- (s) Destroy or remove any wildlife, infrastructures and plants /trees, sign boards of the protected areas.
- (t) Swim in lake, river or approach glaciers inside the National Park/ protected area or camp in areas of wildlife interest or their habitats.
- (u) Collect specimens of wildlife (animals, birds, butterflies, insects, moths, etc.) without permission of the competent authority.

DO's: The parties shall

- (a) Engage trekking service providers who are genuine Sikkim subjects and possess the Certificates of Identification.

- (b) Engage pack animals owned by genuine Sikkim subjects who possess the Certificate of Identification.
- (c) Provide adequate cooked food for the trekking service providers while in a wildlife area and ensure that they do not use firewood.
- (d) Obtain a permit and pay prescribed fees before entering a wildlife area.
- (e) Register at the forest/wildlife check posts before entering a wildlife area.
- (f) Arrange to carry sufficient kerosene and LPG for heating and cooking purpose.
- (g) The pack animal operator shall arrange for fodder for the pack animals and ensure that they do not graze freely in wildlife areas.
- (h) Keep to the permitted nature trails and treks.
- (i) Segregate degradable and non-degradable litters and burn or bury all bio-degradable items and carry back all other non-biodegradable items.
- (j) Also inform the nearest Wildlife Check Post, in case the parties come across forest fire, wildlife offence by someone, death or carcass of wild animals during their nature trip.
- (k) Obtain permission from the State Home Department and also from State Chief Wildlife Warden, Forest for Alpine Expedition.

Note: The actions stipulated above are prohibited under the provisions of the Wildlife (Protection) Act, 1972 (amended up to 2006) and the Sikkim Wildlife (Regulation of Trekking) Rules, 2005, which attract penalties with fine or imprisonment to the offenders.

The Himal Rakshak

Nearly 60% of Sikkim (4,187 sq. km) lies above 3000 meters and most of this are classified as Reserve Forests. This sub-alpine and alpine landscape of the



Sikkim Himalaya locally referred to as *Himal*, has a unique ecosystem and comprises of 285 glaciers, 316 glacial lakes and ten mountain peaks that rise above 7000 meters.

It also harbours important tourism destinations like Tsomgo (Changu), Nathu-la, Gurudongmar, Yumthang, Dzongri, Yambong, Maenam and Barsey. Most of the peaks, lakes, rivers and caves here are considered sacred and are visited by pilgrims to pay homage.

Though most of lower and middle hill forests have been brought under the Joint Forest Management (JFMC/EDC) network, the upper hill forests of the Himalayas, inspite of determined efforts, still continue to be under inadequate management, beset with threats and need urgent interventions. The main threats being unregulated grazing, unplanned trekking tourism, hunting and trapping of wild animals, smuggling of medicinal and aromatic plants, global warming and lack of awareness amongst the security forces. Effective conservation of the Himal by forest staff alone is very difficult due to its high altitude, remoteness, tough terrain, harsh climate and limited resources available. Further lack of adequate infrastructure and facilities make every patrolling visit more like an expedition, with a large contingent of support staff and resultant high attendant costs.

Hence it was decided to enlist the support of the villagers, practicing traditional subsistence livelihoods in the high altitudes of the Himalayas, in

conservation management. Such villagers, who are willing, were to be recognized as *Himal Rakshaks* (honorary mountain guardians) and their capacity building done. This would result in a more effective, participatory “on ground” conservation of the Himal jointly with the Forest Department. Since it is their traditional livelihoods which compel the Himal Rakshaks to access the Himal, these livelihoods will be permitted in a regulated manner, provided they perform their duties and responsibilities.

The main duty and responsibility of a *Himal Rakshak* is to assist whole heartedly in wildlife conservation work with regard to the following matters:

- a. Control of poaching and clandestine trade in wild animals and products / articles thereof.
- b. Detection of offences under the Wildlife (Protection) Act and the rules made there under.
- c. Preventing damage to the habitat of wildlife.
- d. Preventing smuggling of medicinal and aromatic plants for trade.
- e. Preventing instances of bio-piracy by tourists and others.
- f. Reducing the negative impacts from unplanned trekking tourism.
- g. Carrying the message of conservation to the people and enlisting their public support for nature and wildlife conservation.
- h. Carrying out biological surveys and monitoring.
- i. Render assistance to the forest personnel during their visits to the Himal.
- j. Any other matter related with the conservation of wildlife, which may be entrusted by the concerned Divisional Forest

Officer.

Best time to Visit

The best season to visit the Kanchenjunga national park is between April to May. Snowfall is heavy during the winter months and monsoon showers occur from May to mid October.

How to Reach:

- Nearest airport:
 - I. Bagdogra Airport, Darjeeling district, West Bengal (222 km (138 mi))
 - II. Gangtok Helipad, East Sikkim district, Sikkim.
- Nearest railhead: New Jalpaiguri, Siliguri Junction (221 km (137 mi))
- Nearest highway: NH 31A (Sevok Gangtok)
- Nearest town: Yuksom in West and Chungthang in North (20 km (12 mi))
- Nearest city: Gangtok

GLIMPSES OF PHOTOGRAPHS TAKEN FROM VARIOUS AREAS INSIDE THE KNP:



Moonset and sunrise over Jonsang peak North Sikkim



Mt. Muguthang



Mt. Narsing



High Altitude lakes in KNP



Zemu Glacier



Thangshing



Indo Nepal Border at Boktok.



View of Khangchendzonga range from Sakyom Upper Dzongu



Tholung Chu Fall



Khacheodpalri Lake

SWACHH SARVEKSHAN: GANGTOK in Top Ten Cleanest Cities in INDIA



The Union Ministry of Urban Development commissioned an extensive survey to study the progress of the Prime Minister Narendra Modi's Swachh Bharat Mission and to rank 73 cities on sanitation and cleanliness. The survey, the first for the Swachh Bharat Mission, was conducted by the Quality Council of India (QCI) and was named **Swachh Sarvekshan**. It covered all state capitals and another 53 cities with a population of above one million. It involved three streams of data collection - *interaction with municipal body, direct observation and citizen feedback*. Swachh Sarvekshan evaluated the work done in the following six measurable aspects of sanitation and hygiene:

- Strategy for Open Defecation Free town (ODF) and Integrated Solid Waste Management (SWM)
- Information, Education and Behaviour Change Communication (IEBC) activity
- Sweeping, door to door collection and transportation (of solid waste)
- Processing and disposal (of solid waste)
- Provision of public & community toilet seats
- Construction of household individual toilets

Swachh Sarvekshan was conducted between 5 January 2016 and 20 January 2016. The Results, as per the latest available sources, are as follows:

Swachh Sarvekshan Ranking	City	State/ Union Territory
1	Mysore	Karnataka
2	Chandigarh	Chandigarh
3	Tiruchilapalli	Tamil Nadu
4	NDMC	Delhi
5	Vishakapatnam	Andhra Pradesh
6	Surat	Gujrat
7	Rajkot	Gujrat
8	Gangtok	Sikkim
9	Pimpri-Chinchwad	Maharastra
10	Greater Mumbai	Maharastra

Source: Wiki Pedia, Swachh Sarvekshan

A CENTENNIAL EVENT! TIGER NUMBERS HAVE FINALLY INCREASED!

The number of tigers in the wild is now **3,890**! This updated minimum figure, compiled from IUCN data and the latest national tiger surveys, indicates an increase on the 2010 estimate of 'as few as 3,200', a **first ever in the last 100 years**.

"For the first time after decades of constant decline, tiger numbers are on the rise. This offers us great hope and shows that we can save species and their habitats when governments, local communities and conservationists work together."

Marco Lambertini, Director General of WWF International

Why is this important?

With every tiger, we protect around 25,000 acres of forest.

When tigers are protected, we save so much more. As a large predator, the tiger shapes the ecosystem in which it lives. Protecting the tiger benefits the hundreds of other species plants, mammals, birds and insects - that share its habitat. So all that it takes to bring a change and save the planet, is a few **#MoreTigers**.

In 2010 at the Tiger Summit in Russia, tiger range governments across the world agreed to act to double wild tigers by the next Chinese Year of the Tiger in 2022 as part of the Global Tiger Initiative process. **This goal is known**

as **Tx2**. In 2014, tiger range governments agreed to announce a new global tiger estimate by 2016, based on full, systematic national surveys. The new minimum estimate of close to 3,900 tigers is based on the IUCN Red List of Threatened Species account for tigers, updated for countries where national tiger surveys have taken place since the IUCN assessment.

What WWF-India does for Tigers

WWF-India's work for tiger conservation aims to maintain and restore tiger habitats and critical corridors while protecting the tiger and its prey base in the tiger landscapes within India, eventually leading to an increase and

stabilization in tiger populations across the country.

WWF-India currently works for tiger conservation in seven tiger landscapes:

- The Terai Arc Landscape
- The Sundarbans Landscape
- The Satpuda-Maikal Landscape
- The North Bank Landscape
- The Kaziranga-Karbi Anglong Landscape
- The Western Ghats-Nilgiris Landscape

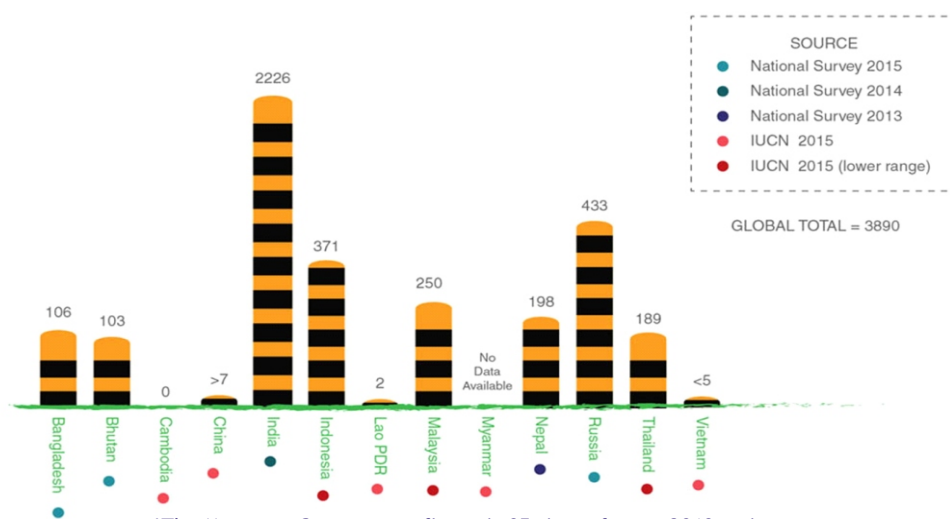
WWF-India also works in certain important tiger habitats that fall outside these tiger landscapes, namely Ranthambore, Similipal, Panna and Buxa

Tiger Reserves.

Their work involves **research & monitoring of tiger landscapes, managing human-tiger conflict**, providing strategic infrastructure support, capacity building of frontline staff, working with local communities in and around critical habitats and corridors, **environmental education & awareness**, policy & advocacy and working through TRAFFIC to reduce the threat of poaching.

(For details on WWF India's Role in Tiger Conservation please visit their page www.wwfindia.org)

WHERE DO WE STAND TODAY?



*The Myanmar Government figure is 85 tigers from a 2010 estimate. However as there is no recent survey data available, this figure has not been included.

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Invitation for Article / Research paper

Dear Readers,

Research papers / Articles related to ecotourism, climate change & mitigation are invited for free publication in the ENVIS newsletter. The same will be uploaded in the ENVIS website with due courtesy of the author.

Terms and conditions for publication:

- The article should not be published anywhere.
- Closely related with ecotourism related subjects or climate change.
- Full paper with abstract notes.
- 650 to 700 words in English language.
- High resolution pictures (3,4 nos.) of the topic.

Note: Publication of the research paper/ article will be decided by the editorial board of the Newsletter.

Please send your valuable suggestions, queries, comments and articles to:

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