

Report on impact of tourism on tigers and other wildlife in Corbett Tiger Reserve

A study for the Ministry of Tourism,
Government of India

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OBJECTIVE

To assess and understand the impact of increasing tourism activities and infrastructure in and around Corbett Tiger Reserve on wildlife. It is hoped that this report will serve as an indicator of the devastating impact of insensitive and unsustainable tourism on wildlife, and serve as an information base to formulate a sound ecologically sensitive tourism policy around critical tiger habitats, in this case particularly Corbett tiger Reserve.

SUMMARY

- *Tourist resorts have all but blocked the very crucial Kosi river corridor that links Corbett to the Ramnagar Forest Division*
 - *The kind of tourism practised is not in sync with conservation objectives in a critical tiger habitat*
 - *CTR is getting crowded from all sides, and new tourism hotspots are now crowding other corridors i.e . Belpadao (or Bailpadao)-Kotabagh*
 - *Tourism inside the core critical habitat unsustainable*

Current tourism activities and infrastructure is impinging on tiger and elephant corridors, and threaten to irretrievably block crucial links and isolate critical populations. The rapid growth of tourism –both in terms of number of tourists and infrastructure is unsustainable. It can be safely concluded that in its current form tourism is a serious threat to Corbett.

It must be clarified here that while Corbett is one of our more secure tiger populations, it faces a plethora of threats. However, as per the mandate of this report we shall largely stick to tourism which is today one of the major threats to the reserve and its wildlife, especially large mammals like tigers and elephants.

CORBETT TIGER RESERVE

On April 1, 1973 Project Tiger, the biggest conservation initiative of its time, was launched in Corbett National Park, which was designated a tiger reserve, amongst the first nine that were born of the initiative of the then Prime Minister Mrs Indira Gandhi.

Today, Corbett is one of our best-preserved parks, with a population of 164 tigers, and over 600 elephants. Corbett Tiger Reserve has the highest density of population of tigers in the country at 20/100 sq km, according to the All India

Estimates of Tigers and Co-predators and Prey conducted by the Wildlife Institute of India, in collaboration with the National Tiger Conservation Authority. It is also the only demographically viable population in North-western India and has the “best chances of long term survival.”(Status of Tigers, Co-predators & Prey in India, 2008)

Corbett is the source population for the western part of the Terai Arc Landscape (TAL), and essential for genetic diversity in the region. The TAL frames a grand conservation dream, of a network of contiguous forests and wildlife corridors along the landscape in India and Nepal—stemming from the scientifically established fact that tigers and other large mammals cannot survive in isolated islands. This approximately 20,000 sq km of forest (on the Indian side) comprises a network of Protected Areas (PAs) stretching from Rajaji in the west to Valmiki in the East and includes Corbett, Sonanadi, Dudhwa, Katerniaghat, Kishenpur and Suhelwa. These PAs are connected in part by vital wildlife corridors, but otherwise fragmented and surrounded by agriculture, along with the pressures of the densest human population in the world. The 7,500 sq km of Terai in Uttarakhand can easily support about 200 tigers.

Corbett is also home to a sizeable population of the endangered Asiatic elephant and other critically endangered species including the gharial. Other mammals species include sloth bear, Asiatic black bear, hog deer, sambar, yellow-throated marten, otters - to name just a few. It also hosts a diversity of birdlife, with nearly 600 species including the white-backed vulture, great pied hornbill, Hodgson’s bushchat, orange-breasted green pigeon, Pallas’ fish eagle, tawny fish owl, golden oriole, Indian pitta, scarlet minivet, reptiles like the critically endangered gharial, mugger crocodiles, the king cobra and much more.

Crucially, the Corbett landscape also forms the catchment—and ‘treatment’ zone of a number of rivers such as the Kosi and Ramganga which feed and irrigate land in downstream areas.

Corbett has a rich conservation history. It was named after the legendary hunter-conservationist Jim Corbett, and is well-described by forest officer, wildlifer and conservationist F W Champion in his classics *With a Camera in Tigerland* and *The Jungle in Sunlight and Shadow*.

TOURISM DESTROYING VITAL CORRIDORS

The Kosi river corridor

Wildlife corridors connecting source populations of tigers are crucial as they help alleviate habitat fragmentation and are especially important for movement and dispersal of animals with large home ranges such as tigers and elephants. Corridors are critical for the long term genetic viability of tigers, and also for maintaining large effective breeding populations. Isolated populations are at far greater risk of local extinction. To secure tiger—and elephant populations of Corbett, corridors—uninterrupted forest areas for tigers and elephants to move to adjoining forests and Protected Areas—are crucial.

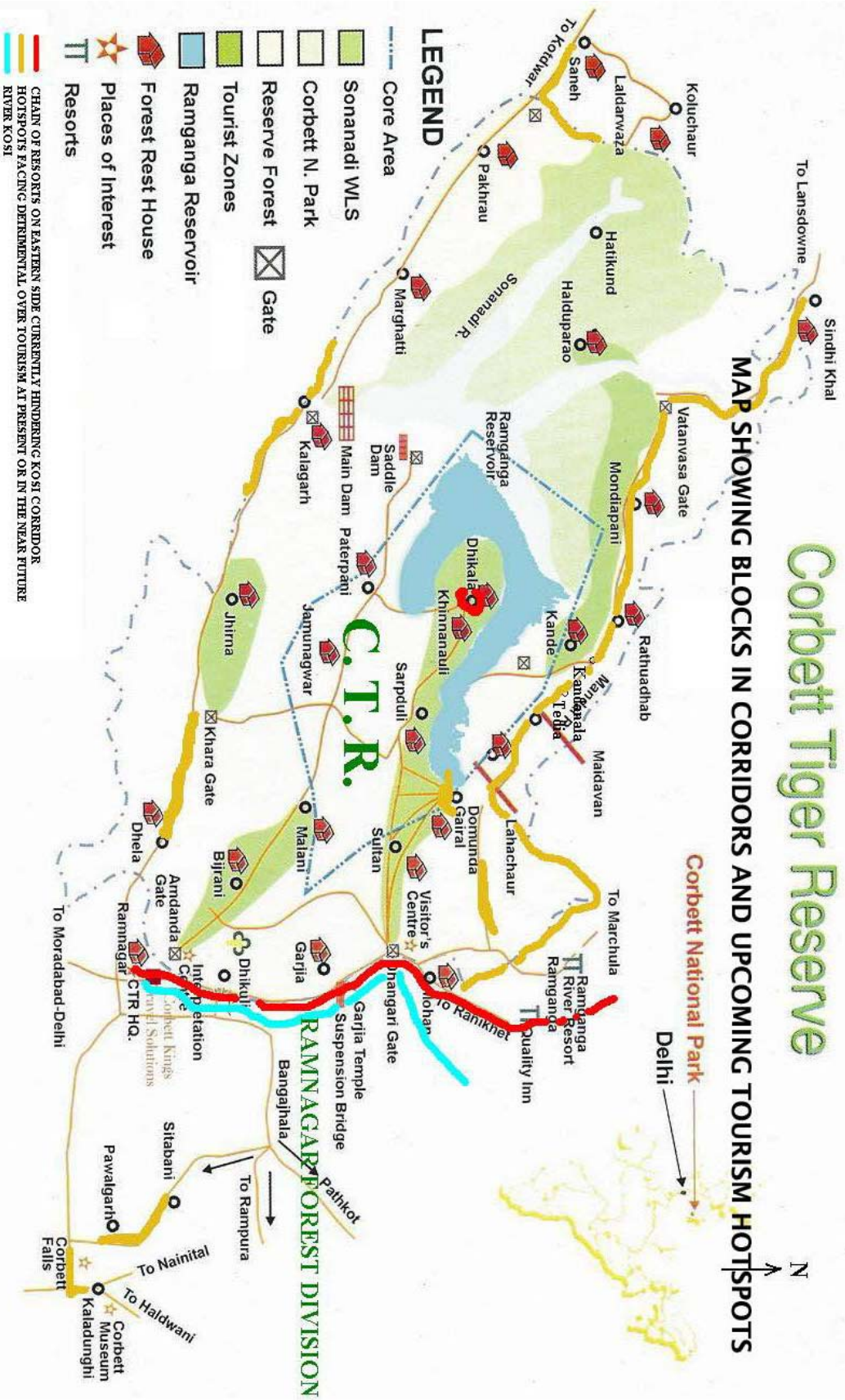
Unfortunately, tourism infrastructure **is blocking tiger and elephant corridors that connect Corbett with adjoining forests.** Dhikuli, on the eastern part of Corbett is a prime example, with a concentration of resorts—over 65 and counting. The resorts at Dhikuli, coupled with the encroachment in Sundarkhal together effectively block the Kosi wildlife corridor—which connects Corbett Tiger Reserve (henceforth CTR) to Sitabani and other forests in the Ramnagar Forest Division. This is one among the 10 corridors identified as crucial to conservation efforts, by the Wildlife Institute of India and also by the state forest department.

The line of resorts extends right up to the edge of the Kosi river, barely five metres in some cases. The other vital bottleneck in this corridor, is the illegal Sundarkhal settlement, an encroachment that has expanded with political patronage. Another block is the factory of Indian Medical Pharmaceutical Limited (a government encroachment?) which falls in the Almora Forest Division.

This is a very significant and critical break in the Terai landscape, and its total blocking, which is imminently near, would mark the end of a grand dream, of conserving the unique eco-diversity of the Terai. It will simply split the Terai Arc Landscape irretrievably and for all time.

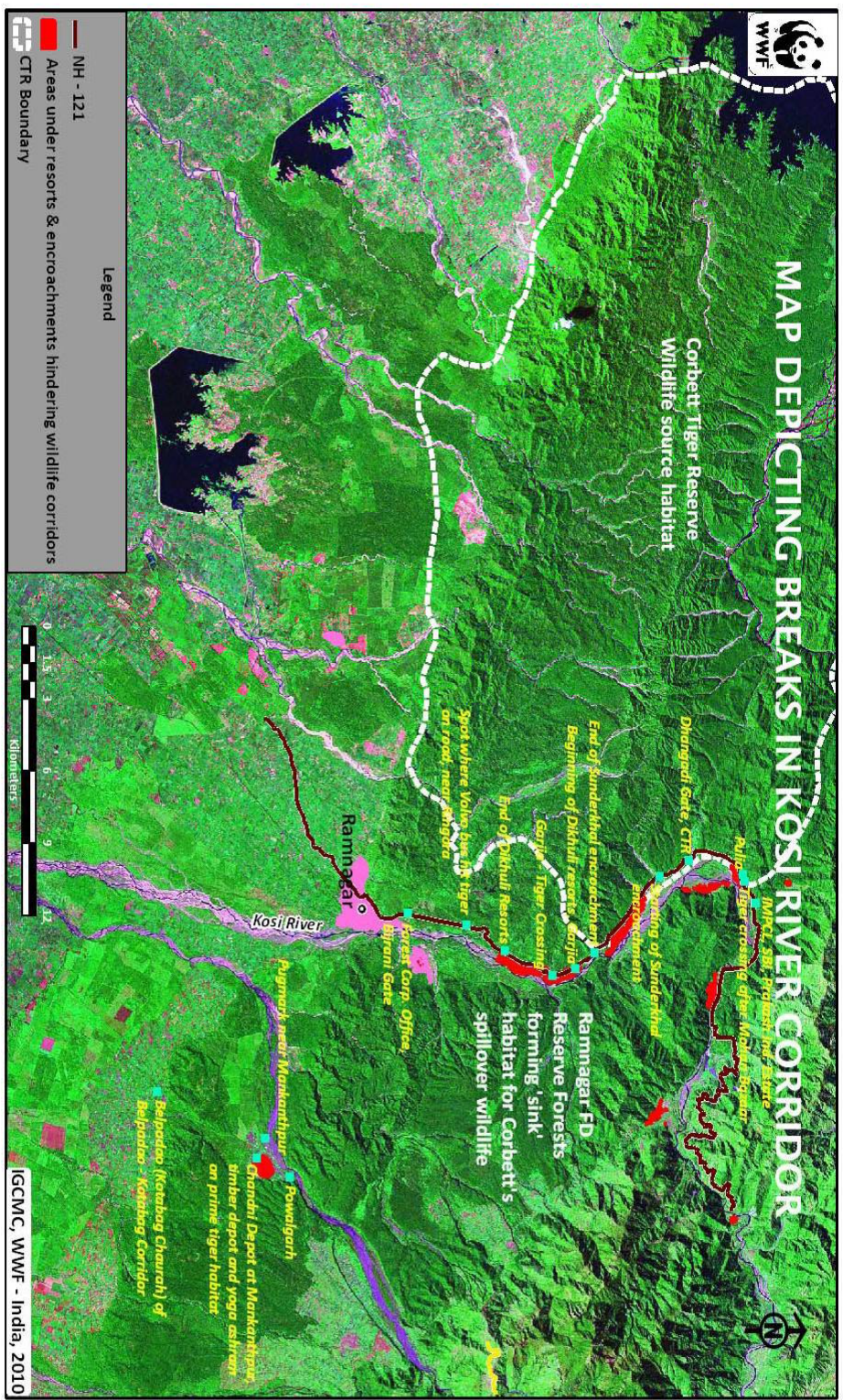
Corbett Tiger Reserve

MAP SHOWING BLOCKS IN CORRIDORS AND UPCOMING TOURISM HOTSPOTS





MAP DEPICTING BREAKS IN KOSI RIVER CORRIDOR



As can be seen from the maps attached at the end of the reports, there is now very little room for tigers or elephants to reach the Kosi—there is a physical barrier due to the construction of resorts and in Sundarkhal. Ringoda is a very narrow passage—just a few metres—for tigers to pass. Shockingly, this path is crowded by elephant safaris and gypsies from resorts who converge here for tiger sighting—not just in the day but also at night. A tiger was hit by a speeding tourist Volvo bus here in December 2007.

The only narrow passage allowing for tiger movement (also getting crowded) is Garajia. Resorts have swooped down here as well—this being another ‘hotspot’ for tiger sightings. It was here that a tiger was reported to have been baited by private elephant safaris for cat-obsessed tourists—making it so familiar with humans that it actually used to follow tourist bearing elephants. Baiting, and the consequent increasing interface with humans familiarises the tigers with humans, and they lose their instinctive fear of man. This changing interface could lead to unnatural behaviour—like killing a human. The tiger, a young male, killed a woman who entered the reserve, was declared a man-eater, and packed off to the Nainital zoo in February 2009.

Compounding the problem is the fact that Corbett is getting crowded from all sides—there are many potential ‘Dhikulis’ bordering the reserve. Most of the village land around the reserve has been sold to outsiders (the ‘land rush’ has pushed rates to unrealistic sums and land prices in some villages are even higher than those in the National Capital Region.)

As we saw, the eastern—the most critical corridor—is almost blocked by Dhikuli. The north-east and northern side are the upcoming tourism ‘hotspots’, right from Sindhikhal to Rathuadhab, Kandanalala, Tera, Marchula and Mohan. Land in most of these villages has been sold—in fact if one traverses the landscape, s/he will notice it changing by the day—with new construction coming up everyday.

A multi-crore state tourism project is reported to be coming up near Sindhikhal. In Bakrakot, on the north-eastern border, a luxury housing project—‘a gated community’ is being constructed even as we speak. Another corridor that is slowly being eroded is the Belpadao (or Bailpadao)-Kotabagh corridor. Though a Reserve Forest, it forms the buffer for Corbett and is rich tiger habitat—fresh pugmarks could be seen here not yards away from upcoming resorts. The Chandni Timber depot of the forest department also squats on the corridor blocking passage. Kotabagh has also been marked for industrial development by the state, and sizeable investment is expected—following which the pressures on the forest will only increase.

It must be remembered here is that places not taken up by resorts are either already blocked by agriculture, towns, human habitation and industries or the terrain is just too steep for animals to use. Tourism, of course, is not the only activity blocking corridors—but it has compounded the problem immensely. It has also changed the land use pattern—from agricultural—fields and *kutchha* houses that animals could cross with relative ease—to resorts fortified in by concrete walls. Plus, the population of the Ramnagar town is exploding and construction is moving both towards the forest and Kosi river. Corbett is getting increasingly islanded as human activities and ‘development’ presses in. This has also led to increasing man-animal conflict—as has been repeatedly witnessed. A case in point is the tragedy of the ‘Garajia tiger’. A similar incident also occurred around the same time in December 2008 in Tera village, where a ‘straying tigress’ was captured after she injured a woman—though mercifully released in the forest. Elephant conflict is another major concern. Following ancient migratory paths, elephants move towards the forests of Ramnagar, further into the Terai forest divisions. However, with the rapid spread of human habitation and mushrooming of resorts even in the smallest of villages obstruct the path of the elephants. It may be noted here that Kiari village has particularly attracted tourist attention, and resorts are coming up fast here. Kiari is today bearing the brunt of increasing man-animal conflict, as is Mankandpur, Pawalgarh, Peepalchaur, Kalyanpur—which all fall in Kotabagh area. Crop depredation, loss of property, and occasional injury to humans by elephants is reported from this belt due to the rapid degradation and fragmentation of habitat.

What use is a good source population if there are no corridors for connecting forests and allowing animals to disperse?

Angling Resorts in tiger habitat

Under an agreement signed in 2004, four angling resorts were set up, in the heart of the CTR - this is private land but surrounded by CTR, and on the banks of the protected Ramganga river. Different angling associations were given rights to two km of the Ramganga for angling of mahseer, which included catching the fish and releasing them back as part of an ‘eco-tourism’ approach. Initially, the lease was supposed to be for less than 10 years, but it was eventually signed for 30 years.

The model, while good in theory (that each resort protect ‘their’ two km of the river Ramganga and employ local youth) has become a problem of nightmarish proportions. For one, most lodges are flouting existing laws. One of the parties involved in Jamoon reportedly erected a prefabricated structure—contravening law and rules—next to its luxury tents. Another serious concern is that the presence of these lodges has pushed up prices of other land in the village. Most land has been bought by private parties, and other resorts are coming up. Jamoon, once a tiger nursery—a rich breeding area for tigers, now has bike

races—quad biking and zorbing. The peace of the forest is shattered by racing very noisy bikes on 'adventure' tracks built on the river bed. In the protected Ramganga river you can dive, go kayaking, and rafting.

Inside CTR

While tourism resorts bordering Corbett are a major concern, we need to also address the issues inside the National Park.

Dhikala, the main tourism hub is a huge complex with over 120 beds, two restaurants, theatre, reception, parking lot, library, landscaped gardens—on what is, or was, prime grasslands. Garbage is an easy sight in Dhikala—and why not considering that everything from potato chips packets to *paan masala* pouches to cigarettes is sold in the core area of this critical tiger habitat.

Also, staying facilities are available at in Bijrani, Mailani, Gairal, Sarapduli, Khinanauli, Kanda, Lohachaur and Jhirna forest rest houses. The accommodation has increased in recent years, with additional annexes and dormitories being added.

Too many tourists chasing too few tigers...

Corbett sees over two lakh visitors annually. Figures given by the CTR authorities say that 150 vehicles with about 600 people are allowed in everyday. And there is accommodation for over 3,000 around the reserve. Which means there is intense pressure on park officials, and has encouraged corruption (for instance, this new year, the going rate charged by some tour operators for a room in Dhikala was reportedly over Rs 30,000 - while officially the rate is about Rs 1,500). Every morning there is mayhem at the booking office—and a former park director complained that “too much attention and time of park officials and staff is diverted towards tourism.”

This increasing disturbance has led to conflict even within the park. In May 2005, a tigress with four young cubs attacked, and injured, a canteen worker. Though it is not allowed for anyone to leave their rooms after nine, by which times the restaurants and canteens must also be shut; apparently the victim was requested by some tourists to deliver some food around midnight, when he was attacked by the tigress.

Dhikala, and all tourist resthouses now have solar electric fencing—it keeps the tourists safe—but is it advisable to fence off wild creatures and inhibit their movement in a Protected Area?

MALPRACTICES BY RESORTS

While drawing on its name, a majority of resorts around Corbett are promoting a different kind of tourism, which has little to do with a wilderness experience. Most resorts are 'party' and fancy wedding destinations for those seeking entertainment in a different venue. More than three-fourths of the resorts offer DJ nights, rain dances, discs. The question that arises is—is this the kind of tourism we want to promote near India's prime tiger habitat?

Worse, many resorts offer 'guaranteed' tiger sightings—which has given an impetus to baiting for tigers (in the Garajia incident, to ensure a tiger sighting, resorts had reportedly put dead bait - a live one would make too much noise, and draw attention—to lure the tiger, as they frantically ferried the tourists, eight to 10 safaris in a day for the stage-managed tiger show). Meat is thrown in their backyards, by the river, and come twilight, there are high-powered spotlights on the river for spotting of game. Night safaris are conducted by most resorts—it's an open secret. And private elephant safaris continue—the plight of the elephants owned by resorts is another, separate issue that needs to be looked at. Resorts have also leveled the land—shorn off shrubs and forest cover by the riverside and extended their gardens right up to the river, while there are clear norms which state that construction and any activity therefore should be 500 meters away from riverine systems. Worse, some resorts have even diverted river flows so that their property can boast 'riverfront.'

Admittedly, there are some resorts which offer best practices, but these are rare exceptions, one such being Camp Forktail Creek at Bhakrakot. Will add here that a detailed survey of resorts was done by Institute of Hotel Management, PUSA, which must be referred.

Recommendations

- The Tamil Nadu High Court passed an order on December 3, 2010, which said, in reference to elephant corridors near Mudumalai Tiger Reserve and in the Nilgiri Biosphere Reserve “the government will ensure that there is no illegal construction on area shown as elephant corridor. Further, the government should not allow any new construction in the area without prior intimation to the court, and immediate action should be taken against illegal, unauthorised holiday resorts.” The court has also directed that no person should be allowed to put a fresh solar/electrical fencing within the area, and action should be taken for the removal of existing unauthorised electrical/solar fencing. This court order must be referred to and replicated for other

tiger reserves across the country. In the case of Corbett, the removal of illegal construction will go a long way in providing a passage for large mammals. Prohibiting any new construction within critical corridors around CTR is imperative to halt further deterioration and fragmentation of tiger habitat.

- Land use pattern to be defined around Tiger Reserves and Protected Areas, rivers, corridors.
- Strict implementation of Eco-Sensitive Zone around tiger reserves.
- No industrial projects or resorts in the critical zone around tiger reserves, and tiger and elephant corridors.
- The Dhikala tourism complex must be phased out. Not only is it a long standing proposal but a legal requirement as per the Wildlife (Protection) Amendment Act 2006, which allows for no structure inside the core critical tiger habitat. The National Tiger Conservation Authority has mandated that tourism activities should be phased out from core areas, and shifted to buffer zones. NTCA has also advised states that every care should be taken to ensure minimum noise pollution from canters, diesel vehicles in core/critical habitats of tiger reserves. Every effort must be made to promote CNG vehicles or those using bio-fuels. A precedent has been set by Tadoba which demolished its canteen and has stopped overnight tourist stays in the core area.
- The Jamoon (and the other fishing beat resorts) simply need to go. We also need to examine its legality which is in question, since the Centre has not been involved in the agreement between the resorts, the angling associations and the states in what is an important buffer to critical tiger habitat.
- We must urgently examine the legality of resorts on the Ramnagar – Dhikuli road, and other corridors. Have they encroached on forest land? How close are they to the river Kosi? What activities are they doing? Illegal activities and activities incompatible with conservation objectives must be stopped.
- Define activities of resorts & effective enforcement. What is important is not the quantum of tourism, but the quality of tourists Corbett attracts and should encourage.

- While this report concentrates on Corbett Tiger Reserve, it must be highlighted that many other tiger reserves are in a similar predicament. Similar studies and follow up action is urgently called for particularly in Bandhavgarh, Ranthambhore, Kanha, Pench, Bandipur-Nagarhole-Mudumalai, Kaziranga on a priority basis

LAND LEVELLED IN THE HEART OF TIGER RESERVE



TRACKS ON THE RIVER BED FOR QUAD BIKING



RAIN DANCING DISCS, PARTIES.....



TIGER RESERVE OR GARBAGE DUMP?



CROWDING A TIGER-A TYPICAL 'WILDERNESS MOMENT'!

