# SIMILIPAL TIGER RESERVE

A RAPID FIELD ASSESSMENT OF CONSERVATION STATUS

Report submitted to the National Tiger Conservation Authority

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### EXECUTIVE SUMMARY

A committee was set up by the National Tiger Conservation Authority on 14<sup>th</sup> July 2009 to visit Similipal Tiger Reserve and undertake: (1) an appraisal of the damage to infrastructure/habitat due to left-wing extremism; (2) assessment of present status of tiger, co predators and prey animals, and protection efforts; and (3) provide suggestions for restoring the area and eliciting local support to strengthen protection.

Accordingly, the committee undertook a field visit between 1<sup>st</sup> and 8<sup>th</sup> August 2009 to gather first-hand information for an appraisal. During the visit, the committee met a wide range of people including field protection staff, senior officials of Similipal TR and the Orissa Forest Department, senior officials of the civil administration, local villagers and civil society organizations. The committee solicited their views, as appropriate, on the status of the reserve, the threats it faces, and its management challenges. The committee also visited several sites in the core and buffer zones of Similipal TR, which had recently witnessed attacks by left-wing extremists. Recent efforts to assess the status of tigers and their prey in the reserve were also reviewed.

### The committee found:

- i. extensive damage to vital park management infrastructure including range and beat offices, forest antipoaching camps, communication networks, and also, to the morale of park staff. As an inevitable consequence, reserve protection has slackened and threats from poaching and smuggling have grown stronger, but there are sincere efforts by the reserve management to re-establish presence and control on the ground.
- ii. reliable reports on recent presence and activity of tigers both in the core and buffer zones of the reserve, and signs of large mammalian prey, but no quantitative tiger or prey population assessments were possible. There are strong indications that the status of the wild dog is extremely precarious in Similipal TR, and may even be locally extirpated.
- iii. serious challenges faced by the reserve in managing its relationships with local communities along its fringes as well as inside the reserve itself. The reserve and civil administration need dedicated professional/technical support immediately to engage seriously with local communities in and around the park, and particularly, to complete the long-pending process of resettling four villages from the core zone.
- iv. several issues pertaining to staffing policies and human resource management practices of the tiger reserve and state forest department. While seeming like small and routine issues, they have the potential to seriously hamper effective management of the reserve.

Based on its extensive learnings, the committee recommends that:

- i. with transitional support from a larger, competent paramilitary force, the NTCA must help Similipal secure its park staff, rebuild its damaged infrastructure, and strengthen measures against poaching and timber smuggling. This deployment must take a few serious caveats into account, and be in consonance with larger state and central policies of dealing with left-wing extremism.
- ii. alongside measures such as the deployment of a transitional paramilitary force, serious affirmative steps must be taken, based on a sound understanding of the local sociocultural contexts, to regain support of local communities. The very constructive attitude of both the civil and forest administration in this regard must be strongly backed by the NTCA.
- iii. the park's current system of monitoring tiger pugmarks on pugmark impression pads, while remaining an important tool for local monitoring of tiger distribution and activity, *cannot* provide reliable population estimates. Well-designed photographic capture-recapture surveys should be the method of choice to estimate tiger numbers. However, a very sincere outreach effort is necessary, mainly on the part of NTCA to help states transition from pugmark-based censuses to camera-trapping sample surveys, and this must be carried out as a genuine partnership between agencies providing technical expertise and park managements.
- iv. a serious knowledge-based effort, with professional support from technically competent agencies, must be commenced through the assistance of NTCA to help understand local communities in and around Similipal. This understanding should guide the identification of candidate villages for relocation and for locally appropriate strategies to alleviate resource-conflicts between people and the reserve. Such an agency is crucial in facilitating greater coordination between the forest and civil administrations to make voluntary relocations fair and speedy.
- v. the range of administrative and human resources management related issues pertaining to Similipal Tiger Reserve, and State Forest Department must be decisively resolved, if necessary, by soliciting help from the highest levels of state and central administration.

#### ACKNOWLEDGEMENTS

We wish to express our sincere gratitude to the frontline staff and field officials of Similipal Tiger Reserve and headquarter officials of the Orissa Forest Department for their cooperation and support to our work. In particular, we would like thank to Sri Manoj Nair, Deputy Director, Similipal TR and Sri HS Upadhyay, Field Director, Similipal TR. We are also deeply thankful to members of the local community who spoke to us, representatives of local non-governmental organizations and the district civil administration for their help and cooperation in our work. We thank Mr Swain and Mr Manoj Nair for use of their pictures in the report. We are extremely grateful to Pratyush for his energetic assistance, and to Sanjit and Suresh who drove us around cheerfully and tirelessly at all hours of the day and night.

In particular, we would like to pay a special tribute to the commitment and courage of the frontline field staff of Similipal. Without even the most basic infrastructure or logistical support, many of them continue to endure tremendous physical hardship and intense fear, as they resume positions in the remote corners of Similipal to protect the reserve, its wildlife and their habitat.



Forest staff camping in the charred remains of the blown-up Upper Barhakamuda range office.

### THE APPRAISAL COMMITTEE AND ITS TASKS: A BACKGROUND

Similipal (see map in Appendix 1) was one among the first set of nine tiger reserves to be declared in 1973. The three-and-a-half decades of conservation efforts under Project Tiger suffered a major setback when, between 28<sup>th</sup> March 2009 and 15<sup>th</sup> April 2009, a series of attacks were carried out by suspected left wing extremists on the establishments of Orissa Forest Department inside Similipal Tiger Reserve (TR). These attacks resulted in a complete breakdown of infrastructure and protection mechanism in Similipal TR.

Following media reports, reports filed by the Orissa Forest Department, and concerns raised over the status of Similipal in the Parliament, the National Tiger Conservation Authority constituted a four member committee to investigate the matter and come up with recommendations to improve the status of Similipal TR. This committee was constituted on 14 July 2009 and assigned the following three tasks:

- 1. Appraisal of the damage to infrastructure/habitat due to left wing extremism.
- 2. Present status of tiger, co predators and prey animals and protection efforts.
- 3. Suggestions for restoring the area and eliciting local support to strengthen protection.

#### METHODS OF ADDRAISAL

We visited Similipal TR between 2<sup>nd</sup> and 7<sup>th</sup> August 2009. A detailed tour report is provided in Appendix 1. In this section, we describe the methods and procedures we adopted to fulfill the objectives of the trip.

### ASSESSING DAMAGE TO INFRASTRUCTURE AND HABITAT

- We conducted detailed interviews with field officials who served in Similipal TR in the past to establish a descriptive baseline on the physical infrastructure in the park and their use in park management. These interviews also helped us understand the past status of habitat in the park.
- We held preliminary discussions with field staff followed by visits to most of the damaged sites in core and buffer areas of Similipal TR between the 3<sup>rd</sup> and 7<sup>th</sup> August 2009. Specifically, we visited Brindaban, Chahala, Barehipani, Nawana, Joranda, Kabatghai, Nuagan, Debasthali, Barhakamuda, Meghasani and Jenabil (all

- in the core zone) and Gurguria (in the buffer zone) and carried out first-hand assessments of the damage to infrastructure in these areas.
- We talked in detail to the frontline forest staff who were witness to the damage during and after the extremist attacks.
- We also relied on our own observations during the visit to assess incidences of forest fires that were set after the extremist attacks and the resulting damage to habitat.

### STATUS OF TIGER AND PREY SPECIES

- Since primary quantitative assessments of the status of tigers, co-predators and
  prey were clearly beyond the scope of such a short visit, we carried out a review of
  previous assessments undertaken by the Orissa Forest Department and WII.
- We interviewed the range officers of Similipal TR (11 ranges) regarding presence of tiger signs, incidences of conflict and the nature and extent of anthropogenic pressure on the habitat and management responses to these issues.
- Based on our field visits, we also report areas where we encountered animal sign, which, at best, can reflect distribution of wildlife rather than their abundance.

### RECOMMENDATIONS FOR BETTER MANAGEMENT

- Within the Forest Department, we held detailed discussions with staff starting from the PCCF (Wildlife) to the forest guard to have a minute understanding of the structure and functioning of the forest administration as well as future needs.
- We had detailed discussions with the civil administration (District Collector and Superintendent of Police, Mayurbhanj District) to understand their interface and coordination with the forest administration, particularly in the context of activities such as the pending resettlement of villages from the core area of Similipal TR.
- We met villagers who had moved from Similipal TR to a resettlement facility at Kopand/Banabasa to gain a firsthand insight into the implementation of this important approach to creating inviolate core zone to the TR.
- We met people living in and around Similipal TR as well as representatives of civil society organizations active in the area to obtain their perspectives on issues confronting Similipal TR and potential solutions to them.

### SALIENT FINDINGS

#### DAMAGE TO INFRASTRUCTURE AND HABITAT

- Our observations on damage to infrastructure are entirely consistent with the facts reported by the Orissa Forest Department as well as the media. Nearly all physical infrastructure at range, section and beat offices have been destroyed or damaged. The range offices, staff quarters and the guard posts have been blown up and burnt to ashes during the attack. With the destruction of the wireless repeater station at Meghasani, and the theft of several base-stations and handsets, the wireless communication system of Similipal TR is now seriously impaired. Functional wireless communication is still available in the buffer stations, as well as in the core stations of Pithabata, Nawana, Jamuani and Jashipur. Some bridges have been damaged and the prospect of future damage also poses a serious challenge to movement within the park, which otherwise has an impressive network of roads. Tourism facilities and rest houses too have been badly damaged. A detailed account of the damage to the infrastructure as furnished by the Similipal TR authorities is attached in Appendix 4 and some pictures are available in Appendix 5. Some additional detail is also available from our tour report in Appendix 2.
- During our interviews with field staff, they clearly admitted that, given a reduced staff presence in the park in the atmosphere of fear that followed the attacks, there had been an increase in incidences of poaching and timber smuggling. The field staff also expressed helplessness in combating fires set by arsonists that engulfed large areas of the park. Although the onset of the monsoon had reversed some of the proximate damage from these fires, the scale and intensity of their impact on the understory was still clearly evident in many parts of Similipal TR during our visit.
- The impact of the attacks from left wing extremists has clearly gone beyond destruction of physical infrastructure and habitat. The impact of the attacks has perhaps been far more damaging to the morale and confidence of frontline staff, as well as on the functioning of the reserve management itself. It must be stated, however, that despite all odds and continuing threats to limb and life, the field staff are doing a commendable job by not abandoning their field posts and retaining a presence in the core area. Despite the scale of the attacks, the park management too has overcome serious internal administrative challenges (see Recommendations for Better Management) and handled the situation capably.

### STATUS OF TIGER, CO-PREDATORS, PREY SPECIES AND HABITAT

- Given that our field visit was for an exceedingly brief duration (5 days), and we covered far-flung areas of this large (2,750 km²) reserve by road rather than on foot, our appraisal was simply not geared to provide any reliable primary data on the status of the tiger in Similipal TR. Most of the roads in Similipal TR are on lateritic soil, where tracks and pugmarks are very hard to obtain. Besides, the river beds in Similipal are mainly rocky with few sandy beds, making them unsuitable sites to find tiger pugmarks. However, based on the accounts of knowledgeable field staff who had encountered tiger tracks, scats, or kills, we had reports of recent tiger presence in some of the buffer areas (e.g., Bisoi, Kendumundi) as well as from ranges in the core zone.
- The current practice of putting Pugmark Impression Pads (PIP) to get tracks across the reserve is a valuable method to track the distribution and use of areas by tigers. Interviews with Dr. L.A.K. Singh who has served as the research officer and coordinated tiger monitoring in Similipal TR for more than 15 years indicated that, over the years, there has been a drastic change in occupancy of tigers across Similipal TR. His observations, based on the encounter of tiger tracks on PIP, has clearly indicated a reduced occupancy of tigers from North Similipal. Today, despite monitoring PIPs across the entire Reserve, a major fraction of the tiger sign is now encountered in and around the core zone of South Similipal. While we fully support the use of PIPs as an effective tool for the local management to monitor the spatial and temporal distribution of tigers, their habitat use and even their breeding status in Similipal TR, we are categorically of the opinion that pugmarks *must not* be used as a means of obtaining reliable estimates of tiger number in the reserve.
- We strongly recommend the use of well-designed photographic capture-recapture surveys to estimate tiger abundance in Similipal TR. This was attempted for the first time in Similipal TR in 2006 during the course of the nationwide tiger population estimation exercise led by Wildlife Institute of India (WII). We did not have enough information to review the design of the surveys used in 2006, or the analysis and interpretation of resulting data, but we do wish to make a couple of important observations on the process by which the camera-trapping surveys were carried out. First, to a large extent, we share the dismay expressed by the Similipal TR authorities regarding the manner in which the tiger camera trapping effort was carried out by the WII in 2006. From our interviews with local and senior OFD officials, it appeared that there was virtually no effort made by WII to involve them in the camera trapping effort. We strongly feel that the process of transition from the three-decade-old method of pugmark census to more modern sampling-based methods such as photographic capture-recapture of tigers at camera traps must be

accompanied by a greater outreach effort, particularly on the part of NTCA. NTCA must therefore ensure that agencies providing technical expertise in population estimation do involve staff at all levels from the Similipal TR and foster a greater sense of ownership over the new tiger population estimation process. Second, going beyond process itself, some of the field staff posted in the core area are excellent naturalists who have served actively in the same range for over 30 years and their intimate knowledge of the tiger use of the area can be extremely valuable in guiding the design and implementation of camera trap sampling for Similipal TR. Third, it appears that the entire work carried out in Similipal was by students, with no oversight in the field by senior and experienced scientists at WII. Finally, the report does itself no favour by prominently showcasing dubious data (e.g., Figure 3.9 on Page 53 of the report shows the widespread presence of nilgai in Similipal, whereas, in reality, the species does not even occur here). Understandably then, these factors have contributed to the rejection of WII's tiger population estimate for Similipal—at 20 animals—by the Orissa Forest Department in 2008.

- Thereafter, the Orissa Forest Department reverted to a pugmark-based census in January 2009, which put the tiger number of Similipal TR at 61. We were informed that the detailed report on this census operation has not yet been compiled and hence we are unable to comment on it. Importantly, however, discussions with the Chief Wildlife Warden, Dr. L.A.K. Singh (Senior Research Officer, OFD), Field Director and Deputy Director of Similipal TR clearly indicated that they are not at all averse to the estimation of tiger numbers in Similipal TR using camera traps. The State Government clearly expressed its willingness to support such an exercise provided it is planned and executed in a true spirit of partnership with them.
- Ever since its establishment as a tiger reserve, no quantitative assessment of its large mammalian prey has been carried out in Similipal TR. Although the terrain is hilly, distance sampling method such as line transects with adequate spatial sampling can certainly be used in most parts of Similipal to assess the distribution and density of prey species. In addition, in places such as Debasthali, Upper Barahkamuda, and other open habitats where animals aggregate, the age-sex composition of prey species must also be ascertained to index their demographic health. Considering the impact of trapping and hunting including traditional practices such as *akhand shikaar* particularly on prey species, it is most urgent to initiate a detailed scientific monitoring of the tiger's prey. This activity should be taken up as soon as the security situation permits and should not await the proposed biannual tiger population estimation exercise. Ideally, this must be followed by a serious, long-term (at least 5 years) scientific monitoring programme to be funded by NTCA and undertaken by a competent independent agency collaboratively with the Orissa Forest Department. This programme must establish

- reliable baselines on the status of the tiger, its sympatric predators, their prey and habitat.
- One of the disturbing facts we learnt about during our trip was the precarious status (and even possible extirpation) of the dhole *Cuon alpinus* from Similipal TR. Based on interviews with local forest staff and villagers, it appears that, in the core area, there have been no dhole sightings, scats or kills encountered in several years. Based on the location and connectivity of Similipal TR, it appears that the prospects for natural recolonization are bleak. This is also an issue that merits immediate and serious investigation.
- On a brighter note, the habitat across most of the core areas of Similipal TR that we visited appears free from invasive species, which is a serious problem in other tiger reserves. However, the prime wildlife habitats, the valleys particularly in northern Similipal TR, are all occupied by humans. 65 villages (approx. population 13,000) are present within the limits of Similipal TR, four of which are located inside the core zone. Retired officials suggest that the increase in resident human populations from c. 5000 in 1977 to present levels indicates some immigration also in addition to population growth. Interactions with field staff and our observations (based on direct sighting of prey animals as well as evidences near mineral licks) clearly indicate the bulk of the animals in Similipal TR are confined to the core zone of South Similipal. Consolidation of an inviolate space, by completing the process of relocation of the four existing villages that was initiated many years ago, is of utmost importance and need to be pursued with renewed vigour.

### RECOMMENDATIONS FOR BETTER MANAGEMENT

- Rebuilding of the damaged infrastructure: The entire infrastructure and protection mechanism of Similipal TR has suffered a major setback as a result of the attacks. The immediate priority is to rebuild the damaged infrastructure. The rebuilding of infrastructure is not only necessary to establish the resilience of Similipal to such intimidatory attacks, but it is also extremely important to boost the morale of the staff. Unless the damaged infrastructure is restored in Similipal TR, it will also be extremely difficult on the ground for Similipal's staff to protect the park and its wildlife. Having said that, investments into infrastructure can only be made after ensuring they do not meet the same fate as the structures they replace. We also strongly recommend that while rebuilding/creating permanent camps in future, no permanent structures are built in areas important to wildlife as was done in the past in Balikhal, Kachudahan and Kairakacha.
- Provision of adequate security to the staff of Similipal TR: The staff stationed inside
   Similipal TR have been directly threatened by left wing extremists and hostile

residents, and are clearly functioning under a serious threat to their lives. Under the prevailing circumstances, it is totally unfair and impractical to expect the staff to continue manning remote stations of Similipal TR even after the infrastructure are rebuilt. Hence, we see no option but to suggest the deployment of a paramilitary force well-versed in guerrilla combat situations in close consultation with senior reserve officials. They could, with the forest staff of Similipal, jointly patrol the park as well as secure infrastructure. Yet, this recommendation must be made with a few serious caveats. First, even as we recommend the deployment of a paramilitary force, we are keenly aware that at over 4,000 km<sup>2</sup>, the Greater Similipal Landscape is too vast and rugged a tract to be secured effectively even with a large and competent paramilitary force. Second, the problem of left wing extremism affecting Similipal is a bigger issue than is possible to address in an isolated manner within Similipal's boundaries. Strategies to address this issue in Similipal will have to be in consonance with those adopted at the district, state and indeed, national levels. Regular local-level coordination meetings between the Collector, SP, Field Director as well as local MLAs and MP might help facilitate a coherent response.

- Strengthening measures against wildlife poaching and timber smuggling: Select reserve staff must be trained and motivated to build a strong intelligence network in the villages lying within their beats. The reserve must enable every range officer to operate an intelligence-gathering fund for the purpose. Given the expansion of agriculture into northern areas of the reserve, and the entry of immigrants into interior villages, and the possible role of 'outsiders' in facilitating poaching and smuggling, it would be important to create a simple but robust means (such as an identification card) for distinguishing residents from newcomers. At present, some of these activities may need to be carried out by reviving the Tiger Protection Force and reconstituting it to include members of paramilitary forces, forest staff as well as a dependable cadre of local villagers. In particular, villages like Podadia, Dengam, Badagaon, Dangadiha, Ranibhol, Kendumundi and Tato, which have historically been associated with illegal activities, need to be closely monitored.
- Affirmative action with local tribal communities: Similipal has had serious challenges in its relationship with local communities, well before the Maoist attacks of March-April 2009. An estimated 250,000 people from nearly a dozen tribal denominations reside in over 400 villages on the fringes of Similipal TR and depend heavily on the Reserve. Within the TR itself, over 12,500 people reside in 65 villages, of which 4 lie within the 845 km² core zone. While some villages do practise agriculture, and such agricultural settlements (particularly along the northern buffer) have encroached into the park, most are heavily dependent on the collection and sale nontimber forest produce for their livelihood. Following the Forest Rights Act, there is a greater sense of entitlement among these communities

over forest resources, and the forest department is seen as the single biggest impediment to their pursuit of a livelihood based on the harvest and sale of forest produce. This is surely one of the factors that have contributed to the largely tacit, and at times, express support that Maoists have received from local communities. While deployment of an armed force may be inevitable to protect the lives of forest guards and government property from violent attacks, it must be done alongside efforts to address the main concerns of local communities with balance, sensitivity and skill if Similipal TR desires the support of local communities. The first step here is to establish direct channels of communication with local communities, which is clearly a bigger ask than the Forest Department can handle on its own. The District Collector, Mayurbhani, together with the Field Director, Similipal TR, has shown serious intent about commencing a direct dialogue with local communities, which is a move that must be strongly encourage and backed by the state and central governments. Creative use of tourism and development-related contracts (including NREGS) may be two important avenues by which the stake of local communities in supporting the reserve may be enhanced.

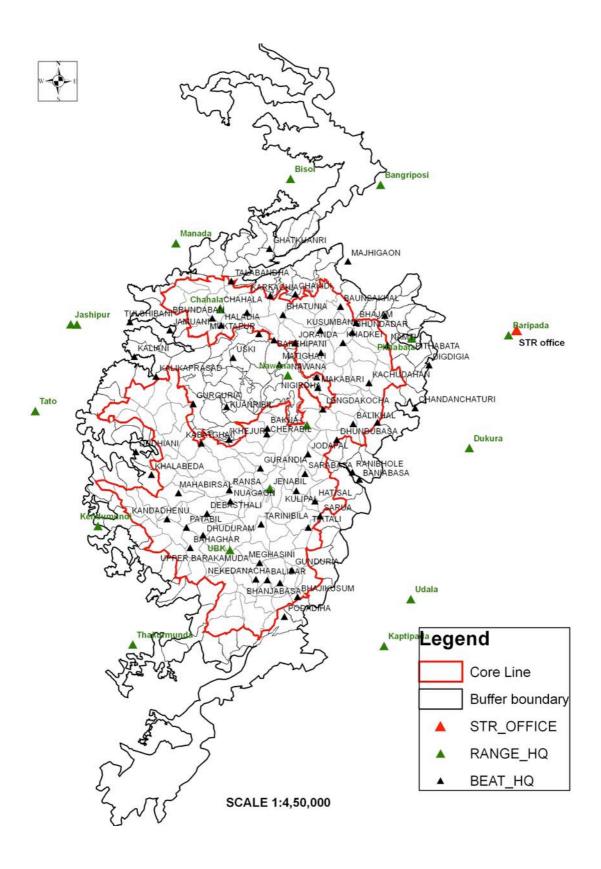
- Creating an inviolate core zone to Similipal TR: Based on information provided by Similipal TR, four revenue villages (Kabatghai, Jamunagarh, Jenabil and Bakua) and two hamlets (Upper Barahkamuda and Bahagarh) are located within the core zone of Similipal TR, and efforts have been underway to facilitate their relocation, subject to their consent. But for Bakua, which has consistently declined to relocate, 149 families in the other three revenue villages have completed the formalities of land acquisition between 1994 and 2003. Following this, it is reported that 72 families did relocate to facilities in Kopand/Banabasa and Ambadiha, but it appears that the rest changed their minds and continue to remain in the villages. There appear to be moves underway to revise the resettlement package for families that continue to remain inside Similipal. Following the extremist activity and subsequent police action, some of the residents of villages like Jenabil who were previously unwilling to relocate have now sought relocation out of a fear of reprisals from Maoists and questioning by police if they remain inside the TR.
- Creating exemplary models of resettlement: Based on our visits to one of the sites of earlier resettlement in Banabasa, we strongly feel that the manner in which earlier resettlements in 1994 and 1998 were carried out leaves a lot to be desired. We emphasize that relocations must be carried out with help and advise from competent agencies and/or professionals in a manner that demonstrably improves the well being of the people being resettled. The NTCA could also facilitate visits for the civil and forest administration officials to sites like Bhadra, which has become a model for the way in which its resident villages were resettled outside. We strongly recommend the NTCA enlist the services of officers like Mr D Yatish Kumar, who piloted successful relocation effort in Bhadra TR, and well-grounded

- academics like Dr Asmita Kabra, who has closely worked on relocation issues in Kuno Palpur (MP), to advise the forest and civil administration in Similipal TR.
- Interfacing revenue and forest administrations for village relocation: Despite the availability of money with the local administration, the resettlement process initiated many years ago has yet to see completion. What this underlines is the need to create an institutional mechanism that better coordinates between the civil administration and forest administration to generate and sustain momentum with the proper implementation of voluntary relocation schemes. In every instance where resettlement is credited to have worked, this coordination has had an extremely important part to play in facilitating the process. Hence, we propose that the NTCA constitute a Relocation Task Force, a structure/body comprising committed professionals with extensive experience in the human aspects of relocation and rehabilitation who can, either directly or through delegation, interface between the civil and forest administration, coordinate and follow up the entire process of relocation.
- Streamlining the management of Similipal TR: In Similipal TR, besides the Deputy Director, the DFOs of its three buffer zone divisions of Baripada, Rairangpur and Karanjia have always reported to the Field Director, Similipal TR, based at Baripada. However, recently, a post of Regional Chief Conservator of Forests (RCCF) was created at Baripada and the previous incumbent in the position of Field Director, Similipal TR, was promoted to this position. In the absence of clear directives from the state government, the DFOs of the three buffer zone divisions of Similipal TR now report to RCCF, rather than to the Field Director. Besides creating considerable confusion, this has effectively undermined the authority of Similipal's Field Director and made the management of the tiger reserve needlessly difficult. This is a very recent development and the NTCA must take up this matter with the Orissa Forest Department and streamline the reporting lines for the tiger reserve.
- Lack of technical and outreach support to park management: The reserve management has highlighted that Similipal has been without a research or veterinary officer or any other kind of scientific support staff for a long while. Similarly, while there is clearly a need, proper outreach and extension support in the form of a social scientist or ecodevelopment officer too is unavailable. It would be useful if the reserve-level Tiger Conservation Foundation, once formed, could provide the platform to recruit people in these roles. These could also become areas of fruitful collaboration between civil society groups and tiger reserve managements. The NTCA must issue advisories mandating these roles in tiger reserves and also provide startup support to such positions. Further, people in these roles need to learn continually, as would other park enforcement staff,

- particularly with issues such as intelligence gathering, crime investigation and prosecution. This too, must be supported through the NTCA.
- Filling of staff vacancies at Similipal TR: Out of a total sanctioned staff strength of 281 (from the level of Assistant Conservator of Forests to Forest Guard), there were 101 vacancies in the whole of Similipal Tiger Reserve at the time of the extremist attacks. In particular, at the time of our visit, vacancies in the Similipal TR division which comprises the core of the Tiger Reserve, were at crisis levels. Over 50% of all positions were vacant at the time of the extremist attacks, with all 3 Assistant Conservator of Forest positions, 5 out of 13 Range Officer positions, 18 out of 44 Forester positions, and 60 out of 108 Forest Guard positions being vacant. Similipal TR is currently facing a severe crisis as far as staff strength is concerned, although efforts are under way to post 39 forest guards recently recruited by the Orissa Forest Department. Unless these vacancies are filled, we expect very little change on the ground. If necessary, NTCA must fully fund these positions and, more importantly, monitor and ensure that there are no vacancies for funded field staff positions.
- *Time-linked promotion of field staff*: We noted that many of the field staff were likely to retire in the same post they had been initially appointed, even after having put in c. 35 years of service. This deplorable state of affairs is both due to poor human resources management at the state level and because of recent upgrading the minimum qualification for positions, as a result of which staff recruited under lower qualifying requirements are never ever promoted. Time-bound promotions have to be the introduced and at least for the old timers, promotion criteria need to be relaxed.
- Women field staff in core zone: We noted that the recuitment policy of the state stipulates that 30% of the staff be women. While this is, in general, an extremely progressive move, park managers express legitimate constraints that this policy imposes when it is extended to the recruitment of core zone field staff. Under the strenuous field conditions of Similipal TR, where forest guards are expected undertake rigorous patrolling, women are often unwilling or unable to perform these roles, which genuinely handicap field managers. Hence, we feel that, at least the core STR Division should be exempt from this rule, and women already recruited under this policy (about 20+) should be interchanged with male staff from the buffer/circle.
- Better welfare policies for Similipal TR staff: During our visit to Similipal TR, we came across many frontline staff who had served their entire working life in the core zone of Similipal TR. Some of these places are extremely remote and prone to malaria. Constant use of anti malarial drugs had had serious side effects (e.g., hearing loss) on staff posted inside the core zone for prolonged periods of time.

Specifically, we suggest: one, a generous risk pay component to field staff (Forest Guards, Foresters and Range Forest Officers) to serve as incentive and compensation for the harsh working conditions within the park; two, generous medical insurance cover and a doubling of life insurance cover for field staff during the period when Similipal TR remains under Maoist threat; three, a reliable system of conveying rations and medicines to staff working from field posts; four, a free student hostel at Baripada exclusively for school- and college-going children of serving frontline staff; and five, a transfer/policy that ensures that younger staff are preferentially posted to both the core and buffer of Similipal TR and are regularly rotated between core and buffer zones.

### APPENDIX 1: MAP OF SIMILIPAL TIGER RESERVE



### **APPENDIX 2:** TOUR REPORT

### 01 August 2009

After an initial round of discussion at Suresh Mishra's residence on matters related to Similipal for about an hour, all three of us (MD Madhusudan, Bivash Pandav and Suresh Mishra) met Mr. B. K. Patnaik, CWLW, Orissa in his office in the afternoon. Mr. S.S. Srivastava, the former FD, Similipal Tiger Reserve and currently CCF in PCCF(WL) office and Dr. L.A.K. Singh, Senior Research Officer were also present during the meeting. We briefed the CWLW regarding the agenda of our visit to Similipal. Following points were discussed during the meeting:

- Extent of Naxalite attack on Similipal
- The Union Environment Minister's concerns on Similipal during the recently concluded Field Directors' meeting at Sariska
- WII's projected figure for Similipal and the recently concluded pugmark census in Similipal
- Issues of village relocation in the core area of STR

The CWLW expressed a strong view that we must first visit Similipal, gather our own opinion rather than going there with a biased versions of reality gathered from the department officials. In the evening, MDM and BP met Mr. Biswajit Mohanty, Member, National Board for Wildlife and discussed the overall wildlife conservation scenario in the state and his experiences with Similipal.

### 02 August 2009

Mr. Manoj Nair, Deputy Director, STR accompanied us (MDM and BP) to Baripada from Bhubaneswar. On the way we had long discussion with Mr. Nair regarding Similipal. Some of the points that he outlined during the discussion were:

- Acute vacancy in the position of forest guards and foresters in the park.
- The administrative scenario of the tiger reserve
- The biological richness of the area, its unique mix of floral and faunal elements from across biogeographic realms, and the recent findings of a possibly Himalayan species of plant from Similipal
- Issues related to pugmark census and the overall status of tigers in Similipal

We reached Baripada around 9 PM and spent the night at Hotel Ambika.

### 03 August 2009

Our first meeting at Baripada was with the District Collector and SP of Mayurbhanj. Both of us (MDM & BP), along with Mr Nair, met the two senior most officials of the district at the office of Collector, Mayurbhanj. The Collector, Dr PK Meherda, had recently taken charge. He showed sincere interest in the relocation issue and was keen to learn about good examples of successful relocation carried out in the country. He indicated his keen desire to visit Similipal at the earliest. He also informed us that he was in touch with the Field Director and was keen to look into further details regarding relocation of villages from the core area.

The SP informed us about the security situation inside STR. From his briefing, it was clear that the Naxalites were still present inside STR and combing operations had not yielded much result so far. During the meeting the SP underlined the lack of coordination between the forest department, on the one hand, and the civil administration and law enforcement authorities on the other.

We met the Similipal Field Director, H.S. Upadhyay, at the Salbani Forest Rest House. Like the Collector, the Field Director had also recently assumed charge of STR. The following points during our discussion with him:

- The infrastructure was been badly hit inside the National Park during the attack
- There was almost 60% vacancy at the level of forest guard and forester, as well as at the level of RFO and ACF.
- There was a 33% reservation for women, including for field positions in the core zone, during the recruitment process
- The average age of staff is around 55 and most of the frontline staff would retire by 2011. Even if new recruits were in place, it would be very hard for them to straightaway replace the knowledge and ability of old staff.

After lunch with the FD, we left for Jashipur. The Deputy Director of STR accompanied us. On the way, we stopped at three territorial range offices, which partly or fully fall under the buffer zone of STR. Our first stop on the way to Jashipur was at Bangiriposi range office of Baripada Forest Division. Shri R.C. Murmu, RFO, Bangiriposi, informed us about the three beats of his range that fall within the buffer zone of STR. As per the information furnished by him, the guard position in one of these three beats was lying vacant since the last two and half years. While confirming tiger presence in his range, he categorically denied any instances of human-tiger conflict in his range. Shri Murmu also briefed us about the construction activities such as water harvesting structures and roads as part of NREGS that is being taken up in his range as a trust building measure with local communities.

The next stop on our way to Jashipur was at Bisoi range office that falls in Rairangpur Forest Division. Shri G. S. Mohanta, Range Officer, Bisoi was admirably straightforward in his approach and openly discussed the management issues of STR.

Two out of five sections, covering an area of 140 km² of Bisoi range (300 km²) falls within the purview of the buffer zone of STR. Shri Mohanta informed us about the presence of tiger as well as about the two cattle kills in last two and half years in his range. Illicit felling of trees was the major problem in Bisoi range. Shri Mohanta made it very clear to us that following the extremist activities in STR, there had been considerable restriction of movement of his staff and this has given rise to an increased poaching of wild animals. Like most other areas of STR, Bisoi range is also suffering from acute staff shortage. While a forester mans one of the two sections that fall within STR, only two guards man the seven beats. Shri Mohanta also raised the issue of pressure from local politicians on sensitive issues like poaching.

Our last stop before reaching Jashipur was at Manada range office of Karanjia Forest Division. Shri Salwinder Singh, Range Officer, Manada informed us about the absence of tiger signs from his range during the January 2009 census operation. He also informed us about Uski, Jamuani and Barehipani areas within his range that were attacked by the extremists. Four beats of Manada range under the buffer zone of STR had vacancies in forest guard positions.

Around 10 PM we reached Jashipur. At the Jashipur Forest Rest House (Khairi Nivas – named after the famous tigress Khairi) we met Shri B. Mohanty, Range Officer, National Park and Shri B.N. Marandi, forester. Shri Marandi has already put in 34 years of service at STR. Based on his experience he informed us that there has been a decline in animal signs as well as encounter rates over the years. During the discussion with the Deputy Director and Shri Mohanty, we figured out that there are only three range officers manning the seven ranges of the national park. We spent the night at the crocodile-breeding centre at Ram Tirtha.

### 04 August 2009

Shri Suresh Mishra and Shri H.S. Upadhyay, Field Director, Similipal joined us in the morning at Jashipur. Immediately after breakfast, all of us left for Chahala. On our way to Chahala, we came across a group of six STR staff on a foot patrol near Brindaban check post. Miscreants had vandalized the guard post at Brindaban after the major attack on 28 March. Although this guard post was not set on fire, everything inside was ransacked and destroyed. The miscreants also damaged the doors and windows of this guard post. Two of the six patrolling staff encountered at Brindaban, Santosh Dalei and Ganeswar Si, gave us a first-hand account of the attacks at Chahala on the evening of 28 March 2009.

After a short drive of 3 km from Brindaban we reached Chahala. Chahala was the major tourist attraction in STR. Every single building in Chahala complex bore signs of vandalism. The roof and the wall of the range office at Chahala had been completely blown up. The old forest rest house at Chahala was also completely vandalized. We saw some sloth bear and civet scats inside the rest house. The

patrolling staff informed us about the reduction in the size of chital herds that used the meadow in Chahala from 100-150 to 10-15 after the attack.

From Chahala we moved on to Nawana range office via Barehipani. At Nawana, we met the range officer and his staff at the range office. Nawana is one of the very few places in STR that has escaped the attack by extremists. In fact, following the first attack on 28 March, the extremists tried to attack the range office at Nawana. The Special Operations Group of Orissa Police stationed at Nawana Forest Rest House exchanged fire with the extremists and managed to drive them away. After lunch at Nawana, we proceeded to Joranda, where a recently constructed tourist facility was completely burnt to ashes. The forest rest houses as well as the guard posts at Joranda were also completely damaged during the attack. From Joranda we drove back to Jashipur and spent the night at the tourist facility at Ram Tirtha.

### **05 August 2009**

Along with the Field Director and Deputy Director of STR we set out for the core area in South Similipal early in the morning. We entered the park through the Gudgudia gate and stopped at the Kabatghai village inside the core area of STR. Half burnt doors and windows in the guard post located inside Kabatghai village showed signs of vandalism. We spent an hour talking to villagers of Kabatghai. We noticed a clear lack of enthusiasm among the villagers when the issue of relocation was raised. The range officer and his staff informed us that the villagers are willing to shift provided they got good arable land with irrigation facilities for agriculture. From Gudgudia, we passed through Jamuna village and reached Debasthali via Nuagan guard post. On our way to Debasthali we came across a group of four elephants, a herd of spotted deer and couple of barking deer. We saw fresh signs of sambar, gaur and elephants in the mineral lick near the burnt guard post at Debasthali.

Shri Suresh Mishra returned to Bhubaneswar from Debasthali and along with Field Director and Deputy Director we proceeded towards Upper Barhakamuda. On our way to Barahkamuda we came across a sambar doe with her fawn. The range office at Upper Barhakamuda was completely damaged during the attack on 29 March. We were moved to see the STR staff living within a corner of this damaged structure. While the extremists blew away the range office at Upper Barhakamuda, surprisingly the FRH near the range office was spared. On our drive to Meghasani, we saw a couple of barking deer. Both the police and forest wireless repeater stations at Meghasani were the major targets of extremists and both these camps have been completely destroyed.

After returning from Meghasani, we had our lunch at the Upper Barhakamuda FRH. We held discussions with Shri Prabir Palei, Range Officer, Barhakamuada and his staff at the forest rest house and thanked them for the tremendous courage they have shown in protecting this key tiger habitat in Similipal. We then proceeded to Jenabil. We could see only charred remains of a place that used to be a log cabin, designated as

the camp office of the Deputy Director, STR. The adjoining guard posts and other infrastructures in Jenabil were all smashed and burnt during the attack. From Jenabil, we returned to Jashipur via Nuagan, Kabatghai and Gudgudia. At Jashipur we met Shri S.P. Yadav, Joint Director, NTCA and Member Secretary of the Appraisal Committee and briefed him about our visits to STR.

### **06 August 2009**

Shri Yadav left for Chahala and other parts of STR to inspect the damaged infrastructure. MDM and BP along with the Deputy Director went to Kopand village near Banbasa, Jashipur to see the relocation program where a few Kharia families had moved from inside Similipal TR. We were deeply saddened to see the poor implementation of this relocation programme some 15 years earlier. It was clear to us that relocation schemes would find support among local communities only if they measurably and perceptibly improved their life. If anything, the evidently poor status of the relocated *Kharia* families may have acted, quite understandably, as a deterrent to other families within STR considering relocation proposals. After interacting with the relocated villagers for an hour we left for Karanjia. We held discussions with Shri P.C. Mishra, DFO, Karanjia in his office and then left for Kendumundi and Thakurmunda ranges of Karanjia FD on the southern part of the STR buffer zone. At Kendumundi, we met Shri Mayadhar Puhan, RFO, Kendumundi. Three sections of Kendumundi range share their boundary with STR, including the core area. Of the 12 beats in these three sections only seven have beat guards. The RFO, Kendumundi informed us about a cattle kill by a tiger in his range that took place in 2008. Like most other ranges of STR, poaching and timber smuggling are the major problems in Kendumundi range. Bear-human conflict was also reportedly common in this area.

We then inspected the revenue forest near Hatiguda village where there was a proposal to relocate the Kharias of Upper Barhakamuda and Bahaghar in STR. The proposed relocation site is approximately 30 ha of sal mixed forest. This site lies 2.5 km south of STR and we were told that the Kharias themselves have selected this site. Shri P. K. Patnaik, RFO, Thakurmunda was present at the site and explained us about the dialogue that is going on between the STR authorities and the Kharias. After having a discussion with the staff of Thakurmunda range over lunch we proceeded towards Dangadiha village on the bank of Salindi River. Shri Prabir Palei, RFO, Upper Barhakamuda, accompanying us during the trip, informed us that tiger presence was very common in the forests around Dangadiha some 20 years back. Unfortunately, they were not to be seen in this area now. The staff at Dangadiha camp had abandoned their post following the attacks in STR. Dangadiha is known to be a major hub of poaching activity. Abandonment of guard post in Dangadiha will be detrimental for STR since it is a very strategic post and is located right on the boundary of South Similipal. Due to heavy rains, we could not venture further inside the forests of Dangadiha range. In the evening we returned to Jashipur and held a detailed discussion with Shri Yaday on the situation in STR.

### **07 August 2009**

Shri Yadav left for Bhubaneswar and had discussions with the CWLW before returning to Delhi. We (MDM, BP and the Deputy Director) left for Baripada early in the morning. We met the Collector and SP of Mayurbhanj district at the Collector's office and briefed him about our visit to STR. The Collector once again expressed his desire to visit Similipal at the earliest and showed a keen interest in the village relocation from core area of STR. This meeting was followed by a series of meetings with members of civil society of Mayurbhanj district at the Baripada Forest Rest House. We also met DFO Baripada and at his request attended the Mayurbhanj District Environment Society's meeting in the afternoon. In the evening we returned back to Bhubaneswar.

### **08 August 2009**

Three of us (SM, MDM and BP) met the Shri B.K. Patnaik, CWLW, Orissa and briefed him about our visit to STR. Dr. L.A.K. Singh was also present in the meeting. We clearly expressed our concern regarding the vacant positions in STR as well as the issue of line of control between Field Director and Regional CCF. We also had detailed discussion on estimation of tiger and prey population in Similipal. MDM left for Bangalore by the noon flight and BP left for Delhi in the evening.

### APPENDIX 3: PEOPLE CONSULTED BY THE APPRAISAL COMMITTEE

- 1. Sri BK Pattnaik, IFS, Chief Wildlife Warden, Orissa
- 2. Sri SS Srivastava, IFS, CCF and ex-Field Director, Similipal TR
- 3. Sri HS Upadhyay, IFS, CF and Field Director, Similipal TR
- 4. Sri Manoj Nair, IFS, DCF and Deputy Director, Similipal TR
- 5. Sri PC Mishra, IFS, DCF (Karanjia Division), Similipal TR
- 6. Sri Bijay Kumar Panda, DCF (Baripada Division), Similipal TR
- 7. Dr LAK Singh, Senior Research Officer, Orissa Forest Department
- 8. Prof. SK Dutta, Professor of Zoology, North Orissa University, Baripada
- 9. Sri RC Murmu, RFO, Bangriposi Range, Baripada Division
- 10. Sri GS Mohanta, RFO, Bisoi Range, Rairangpur Division
- 11. Sri Salwinder Singh, RFO, Mannada Range, Rairangpur Division
- 12. Sri B Mohanty, RFO, National Park Range, Similipal TR
- 13. Sri M Puhan, RFO, Kendumundi Range, Karanjia Division
- 14. Sri PK Palei, RFO (In-charge), Upper Barhakamuda Range, Similipal TR
- 15. Sri Swain, RFO, Nawana Range, Similipal TR
- 16. Sri PK Patnaik, RFO, Thakurmunda Range, Karanjia Division
- 17. Sri BN Marandi, Forester, National Park Range, Similipal TR
- 18. Sri S Dalei, Forest Guard, Chahala, Similipal TR
- 19. Sri G Si, Forester, Chahala, Similipal TR
- 20. Sri T Sethi, Forester, Upper Barhakamuda, Similipal TR
- 21. Sri T Mahanta, Forester, Nawana, Similipal TR
- 22. Sri B Majhi, Forest Guard, Upper Barhakamuda, Similipal TR
- 23. Sri M Mahanta, Forester, Upper Barhakamuda, Similipal TR
- 24. Dr PK Meherda, IAS, District Collector, Mayurbhanj District
- 25. Sri D Gangwar, IPS, Superintendent of Police, Mayurbhanj District
- 26. Sri Biswajit Mohanty, Member, National Board for Wildlife and Secretary, Wildlife Society of Orissa
- 27. Dr Pratyush Mohapatra, WWF-India
- 28. Sri Deepak Pani, Secretary, Gram Swaraj
- 29. Ms Sanjukta Basa, Honorary Wildlife Warden (Mayurbhanj) and Secretary, Liberal Association for Movement of People
- 30. Sri Bhanumitra Acharya, General Secretary, Sangram
- 31. Sri Amarendra Bose, Baripada Correspondent, Times of India
- 32. Sri Bimal Acharya, DFO, Chilika Wildlife Division
- 33. Families from the Kharia resettlement colony at Kopand, Bana Bassa near Jashipur
- 34. Families from Kabatghai and Baheripani

## APPENDIX 4: DETAILS OF DAMAGED INFRASTRUCTURE

These details have been obtained from the office of the Field Director, Similipal TR. Besides damage reported below, all official records, store articles of the government and personal belongings of staff have been looted, destroyed or burnt.

| Date     | Range                | Place                | Nature of<br>Damage                  | Property damaged   |
|----------|----------------------|----------------------|--------------------------------------|--|
| 28.03.09 | Nawana South         | Dhuduruchampa        | Arson                                | Four buildings   |
|          | Chahala              | Chahala              | Bomb blast,<br>Damage &<br>Arson     | Range quarters blown up and<br>staff quarters burnt down;<br>Doors, windows and<br>furniture in FRH, C-Villa, E-<br>Villa broken; 17 tourists and<br>labourers robbed of valuables<br>& money; VHF Station<br>completely destroyed |
|          | Upper<br>Barahkamuda | Meghasani            | Bomb blast                           | VHF machinery at forest and police repeater stations fully destroyed   |
| 29.03.09 | Upper<br>Barahkamuda | Upper<br>Barahkamuda | Bomb blast                           | Range & staff quarters blown up  |
| 30.03.09 | Jenabil              | Gurandia             | Arson                                | Watch tower  |
| 31.03.09 | Nawana North         | Joranda              | Arson                                | Four nos. of tented accommodation and FG quarters  |
|          | Nawana South         | Dhundubasa           | Arson                                | FG quarters  |
|          | Nawana South         | Lengdakacha          | Arson                                | FG quarters  |
|          | Gurgudia             | Gurgudia             | Damage<br>Gunshot<br>/Arrow<br>wound | Doors & windows of FRH and<br>bamboo hut broken; Captive<br>elephant "Mahendra" injured  |
| 01.04.09 | Jenabil              | Jenabil              | Arson                                | Log house & Range office fully burnt down  |
|          | Nawana North         | Nawana               | Attempt to attack                    | Exchange of fire with police<br>stationed near Nawana<br>Range Office  |
| 03.04.09 | National Park        | Kalikaprasad         | Damage /<br>Theft                    | Check gate damaged / seized produce taken away   |
|          | Gurgudia             | Khejuri              | Damaged /<br>Theft                   | Beat house damaged / seized produce taken away   |
| 04.04.09 | Rairangpur           | Jamuani              | Damaged /<br>Theft                   | Jamuani FRH damaged / seized produce taken away  |
| 05.04.09 | Pithabata            | Pithabata            | Attempt to attack                    | Pithabata (WL) Range<br>Office/ seized produce taken<br>away   |

| Date            | Range                | Place                     | Nature of<br>Damage       | Property damaged  |
|-----------------|----------------------|---------------------------|---------------------------|---|
|                 | Pithabata            | Namti                     | Damaged /<br>Theft        | Beat house damaged / seized produce taken away                                  |
|                 | Chahala              | Brundaban                 | Damage                    | Beat house and check gate damaged   |
| 06.04.09        | National Park        | Ranasa                    | Damage /<br>Arson / Theft | Beat house damaged, doors<br>and windows torched /<br>seized produce taken away |
|                 | National Park        | Gurgudia-<br>Nuagaon Road | Arson                     | Wooden bridge before<br>Ranasa burnt  |
| 07.04.09        | Upper<br>Barahkamuda | Near Debasthali           | Arson                     | Wooden bridge burnt   |
|                 | National Park        | Nuagaon                   | Damage /<br>Arson         | Doors and windows broken and beat house building burnt                          |
|                 | National Park        | Kabatghai                 | Arson                     | Beat house doors and windows broken and building burnt                          |
|                 | National Park        | Khejuri                   | Arson                     | Beat house kitchen burnt and damaged  |
|                 | Nawana South         | Bakua                     | Damage /<br>Theft         | Beat house doors damaged /<br>seized produce taken away                         |
|                 | Manada               | Barehipani                | Damage /<br>Theft         | Doors of beat house<br>damaged / seized produce<br>taken away                   |
| 15.04.09        | Jenabil              | Baniabasa                 | Damage /<br>Arson         | Beat house damaged and burnt  |
| Date<br>unknown | Upper<br>Barahkamuda | Bhanjabasa                | Damage                    | Damage to FRH and staff quarters  |
|                 | Pithabata            | Kachudhan                 | Damage                    | Damage to staff quarters  |

# APPENDIX 5: PHOTOGRAPHS OF DAMAGED INFRASTRUCTURE



Range office at Chahala which was blown up and burnt down during the extremist attacks.



Beat Station at Debasthali after it was burnt



Destroyed staff facility in Joranda



Damaged building and equipment at the wireless repeater station at Meghasani





Log house at Jenabil Range before (top) and after (bottom) the extremist attacks.





Tourism facility at Joranda at the time of inauguration (top) and after extremist attacks (below)