

ANNUAL REPORT

2013-14

(July, 2013 to June, 2014)



SIMLIPAL TIGER RESERVE

ODISHA, INDIA



MS, NTCA and IG NTCA at Meghasini on 22.04.2014



PCCF(WL) and CWLW, Odisha at UBK Range on 24.02.2014



MEE team at Interpretation Centre on 06.05.2014



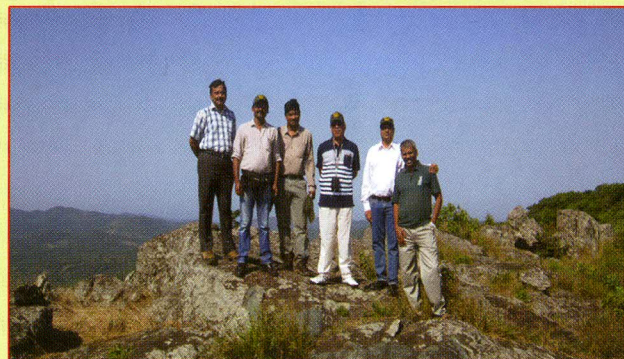
Inauguration of Interpretation Centre at Ramatirtha on 23.02.2014



Chief Secy. chairing Steering Committee meeting for SBRon 20.03.2014



Chief Justices High Court, Odisha and Supreme Court, India at Barehipani on 21.12.2013



Visit of Evaluation and monitoring committee to STR on 07.05.2014



Ambassador, Czech Republic on a trail on 19.04.2014



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01. From Field Director's Desk



The Conservationist will like to forget the period 2009-10 & 2010-11, from the history of Similipal, which saw wanton destruction of flora & fauna under the garb of naxal attack. The next two years i.e. 2011-12 & 2012-13 can be termed as the period of restoration, in which massive efforts were made by Forest Department to restore the anti-poaching camps & rebuild the confidence of staff. In this perspective the year 2013-14 is the year of consolidation, in

which all the good works that commenced during the previous two years were continued unabatedly. So, again the ritual of 'Akhand Shikar' was not allowed to take place for the second year in succession.

This year, the dog squad with their trained masters was deployed in the field successfully. The ban on pesticides 'Thematic' & 'Mono crotophus' inside Similipal Tiger Reserve (STR) was in vogue for the second year. No case of poisoning of elephants was reported during the year.

Two very important settlements in the heart of critical tiger habitat consisting of 32 tribal families were successfully relocated outside the reserve at Asankudar.

The "Kunki" elephants not only continued to earn revenue & charm tourist for the second year but also were deployed for monsoon patrolling in Jenabil Range for the first time. Two experienced elephants 'Mahendra' & 'Sobha' were also deployed for the first time at Karanjia followed by Baripada Division to drive out marauding wild elephants from human habitations.

One of its kind Mobile Veterinary Service unit was introduced in STR with an experienced veterinarian from Wildlife Trust of India (WTI) and well equipped vehicle to rescue & rehabilitate wild animals.

Getting food inside STR was a perennial problem for tourists till last year. This year a woman Self Help Group (SHG) with the support of Similipal Tiger Reserve (STR) started a catering service at Barehipani Forest Rest House (FRH) offering delicious local cuisine to tourist.

Tourist accommodation was augmented with setting up of three more tents at Jamuani. Trekking to a nearly waterfall commenced from Jamuani much to the amusement of nature lovers. Construction of bamboo cottages was initiated at picturesque Kumari village near Gurguria & Jamuani tourist complex respectively.

The entire Similipal landscape was brought under a single frequency Very High Frequency (VHF) communication network, with easy communication between core and buffer staff. Checkgates at Pithabata, Kaliani and Baniabasa, were brought under CCTV network.

The unique management practice “Core within Core’ was continued in letter and spirit. Uses of five footpaths by villagers passing through potential tiger breeding habitats were regulated.

In-house research created a checklist of bats and grass species in various meadows apart from carrying out manual pollination & propagation of endemic ground orchid “*Tainia hookeriana*” for the first time. Introduction of *Dendrobium regium*, *Eria meghasaniensis* and *Cymbidium alofolium*, *Aerides multiflora* & *Rhynchostylis retusa* s, were also taken up by vegetative propagation, and seedling of tissue culture origin respectively. Three new species of flora were added to the floral list of Odisha during the year. A new checklist of 66 species of fresh water fishes was published. A book titled ‘Birds of Similipal Biosphere Reserve’ was also published.

Similipal continued to attract tourists for the second year & recorded a footfall of 24,000 visitors during the year with record revenue generation of Rs.30 lakhs. Interface with villagers continued through Gramsabha and Eco-Development Committees (EDCs) Photo Identity Cards were issued to villagers, of eleven villagers living inside Similipal Tiger Reserve (STR) with support from NGO, PRI & Tahasildar.

Special police combat training was provided to Forest guards and Dy. Range Officers deployed as Special Tiger Protection Force (STPF) through OSAP trainers. Forensic lab created in 2012 was augmented with high-tech instruments like a deep freezer, hot air oven, spectrophotometer and high resolution camera with attached microscope. For the first time, the forensic lab was used to identify the Species from the skin sample seized by Pithabata (WL) Range on 6th April 2014. Following which, the accused was sent to judicial custody.

The prey density during the year has increased to 33.6/km² in pre-monsoon period. 25 nos. of individual tigers has been identified from photographs captured through trap cameras over a small area of 318 sqkm. Efforts to photocapture tigers in other areas are on. Encounter rate for rare Oriental Pied hornbills has increased substantially. Flowers of *Dendrobium regium* orchids have been noticed at many places during the year. These are indicators of a revived status of habitat within the inviolate areas of Similipal Tiger Reserve (STR).

The efforts of Similipal Tiger Reserve (STR) was finally recognized & were rewarded with RBS Earth Heroes Award’2013 in Earth Guardian category for the commendable efforts to protect and conserve biodiversity in the face of severe challenge and constraint. This is a moral booster for the staff, NGOs, PRIs & other officials working in the landscape.

(Dr. Anup Kumar Nayak, IFS)

Field Director, Similipal Tiger Reserve-
cum-Regional CCF, Baripada

02. PROTECTION ACTIVITIES.

2.1 Anti-poaching camps.

Apart from 94 permanent anti-poaching camps, 63 in core and 31 in buffer area, 10 temporary camps in the form of *machans* were established at vulnerable locations.

2.2 Special Tiger Protection Force (STPF).

STPF became functional with effect from 16th August, 2013 by bringing 63 Forest Guards from the 4 Divisions of STR on deputation as per Govt order. Special police training was imparted to the STPF at 5th Battalion of Odisha State Arms Police, Laxmiposi from 26th May to 7th June, 2014. Three Deputy Range Officers have been posted as in-charge Range Officers of STPF. Three nos of vehicles have been provided for movement of STPF. The STPF have been deployed in 7 vulnerable stations of STR for patrolling duty.

2.3 Landscape Level Patrolling.

To have more effective and fruitful protection activity to check smuggling of timber and poaching of wild animals inside Similipal, landscape level forest patrolling and combing operations were conducted frequently where both core and buffer staff participated. 19 Ranges of STR have been divided into 5 landscapes for the purpose. Landscape wise coordination meetings were held under direct supervision of Field Director for capacity building of the staff on wildlife laws and patrolling activities.

2.4 Coordination with police.

Landscape wise coordination meeting of Range Officers and IICs of police were organized from time to time with participation of Field Director, STR, and Superintendent of Police of the District to improve forest-police coordination in protection activities.

2.5 Akhand Shikar.

This is a traditional method of ritual mass hunting practice adopted by tribal living in and around Similipal. The period usually stretches from *Makar Sankranti* in January to *Raja Sankranti* in June though peak period is around *Vishubha Sankranti* in April. Special strategies adopted during the period which are highlighted below.

- Joint combing operation at regular intervals by core and buffer staff in vulnerable routes in association with Hon. Wildlife Wardens.
- Flag march with police personnel in suspected villages.
- Mobilization of staff of all the buffer Divisions and STR Core at vulnerable locations during the peak period in April for round the clock surveillance.
- Awareness of villagers and EDCs in association with NGOs and Hon. Wildlife Wardens.
- Archery competition organized on the eve of *Vishubha Sankranti* among tribal in sensitive villages in association with local NGOs to dissuade the people from mass hunting practice.

2.6 Monsoon Patrolling.

Special strategy was adopted for prevention of poaching and tree felling during monsoon. Combined foot patrolling in vulnerable locations was carried out by core and buffer staff. Surveillance on water channels, salt licks were kept. Movement of suspected poachers in sensitive villages were monitored.

2.7 Informer network.

Informer network in Similipal was strengthened with support from local people and NGOs by which advance information were received helping in prevention of crime relating to poaching and wood cutting.

2.8 Dog Squad.

One Dog squad consisting of a sniffer dog and a tracker dog was made functional in Similipal Tiger Reserve after getting special training on detection of poisons from forest floor from National Training Center for Dogs run by BSF at Tekanpur, MP. Soon after deployment in the field the trained dogs were able to detect poison spot and apprehend poachers in Nawana South Range

2.9 Busting of rackets.

Five cases of leopard skin trade were detected with help of police and vigilance department with seizure of 8 nos of skins. Seven persons were arrested in those cases through establishing backward and forward linkages in the trade.

2.10 Apprehending hunter dogs.

The poachers from the local village in and around Similipal use to take pet dogs to forest who are well trained in hunting wild herbivores through chasing. In two cases, the patrolling staffs have encountered such village dogs with poachers in the core area. In both the cases the staffs have killed dogs one in each case, while the dogs were trying to attack. This has made a significant impact among the local poachers.

2.11 Core within the Core.

A portion of the core zone, about 350 km² area consisting of part of Upper Barakamuda, Jenabil and National Park Range continued to be treated as “**Core within the Core**” to keep the breeding habitat of tigers absolutely inviolate. The area has been declared as ‘No – Go’ area where restrictions imposed on movement of all vehicles including departmental vehicles except for exigencies of protection. Research activities and movement of outside people have also been restricted in this area.

2.12 Synchronization of VHF network.

Synchronization of VHF network of Similipal Tiger Reserve, buffer Divisions and adjoining Kuldiha Wildlife Sanctuary have been completed by bringing the entire VHF network to a common band width and frequency thereby improving communication and sharing of information in the landscape. All the anti-poaching camps within the core area have been provided with high band sets to function along with existing low band sets. The

defunct VHF stations of buffer area have been activated and some new VHF stations made functional with installation of high band fixed sets as listed below.

Baripada Division: Nalakhanja, Sarat, Nedam gate, Podadiha, Udala, Baniabasa, Bahalda, Dukura, Champagarh, Jaldiha, Rangamatia, Bangriposi, Kaptipada, Dangadiha, Betnoti.

Karanjia Division: Bhejidiha, Mituani, Thakurmunda, Dudhiani, Gurguria, Kaliani, Budhigaon.

Rairangpur Division: Bisoi, Manada, Tulsibani, Jamuani, Barehipani, Talabandha

2.13 Regulation on use of roads inside sanctuary.

Regulation have been imposed on movement of villagers inside the tiger reserve in five important footpaths/ roads which are passing through critical tiger habitat and were being used by the villagers regularly to commute to outside the reserve since long.

2.14 Ban on entry of Insecticides.

The ban imposed on entry of insecticides i.e. Themate and Mono-crotophus to Sanctuary continued for the second consecutive year.

2.15 Achievements in Protection.

- During the year, 173 offenders involved in poaching and wood cutting have been arrested from Similipal TR.
- Incidences of *Akhand Shikar* have been reduced to almost zero.
- Patrolling staff have encountered poachers and timber smugglers in inviolate area in 61 occasions.
- 48 country made guns have been seized by patrolling staff in side the Tiger Reserve.
- 8 nos leopard skins have been seized.
- Incidences of elephant poaching have been substantially reduced. There is not a single case of elephant poaching during the year.
- 54 nos of intrusions of poachers have been thwarted by patrolling staff due to advance information received from informers.
- The details of offence cases detected during July, 2013 to June, 2014 in STR are given below.

Division	Total No. of cases detected			No. of persons arrested	Important seizure made			
	OR	UD	Total		Gun	Important Wildlife trophies	Vehicle	Timber in Cum
Baripada	276	324	600	96	34	Leopard skin- 07	37	15.279
Karanjia	212	19	231	17	05	-	05	59.12
Rairangpur	176	24	200	46	00	-	08	12.3663
STR	08	119	127	14	07	Leopard skin- 01	28	8.6
Total	672	486	1158	173	48		78	95.3653

03. HUMAN RESOURCE.

3.1 Retirement.

Following staff of Similipal Tiger Reserve retired from service during this period.

- Sri Narendra Kumar Naik, ACF 31.01.2014
- Sri Chandrasekhar Mishra, Forester 28.02.2014
- Sri Dayanidhi Acharya, Driver 31.05.2014

3.2 New incumbents

- Sri Arun Kumar Biswal promoted & joined as ACF i/c National Park Range
- Sri Kamalakanta Tripathy as ACF, Rairangpur Division
- Sri Shibashankar Sabat as ACF i/c Dudhiani Range
- Sri Achyutananda Mohanty promoted & joined as ACF i/c Thakurmunda Range
- Sri Kusha Chandra Singh as Dy Ranger i/c Kendumundi Range
- Sri Sangram Keshari Mohanty as Dy Ranger i/c Kaptipada Range
- Sri Sukura Bindhani as Dy Ranger i/c STPF, Gudgudia 20.05.2014
- Sri Banabihari Sardar as Dy Ranger i/c STPF, Talabandh 21.05.2014
- Smt Seeta Majhi as Dy Ranger, o/o DD, Tourism & Research 21.05.2014
- Sri Kailash Chandra Naik promoted & joined as Dy Ranger i/c Nawana (N) Range 23.05.2014
- Sri Budheswar Naik as Dy Ranger at STR headquarters 24.05.2014
- Sri Rabinarayan Mohanty as Dy Ranger at STR headquarters 28.05.2014
- Sri Sudhir Chandra Nath as Dy Ranger i/c STPF, Udala 02.06.2014
- Sri Ghanashyam Singh as Dy Ranger, i/c Jenabil Range 11.06.2014
- Sri Subrat Debata engaged as Research fellow
- Miss Truptirekha Kar engaged as research Fellow

04. VILLAGE RELOCATION AND RESETTLEMENT.

4.1 Relocation of tribal settlement at Upper Barakamuda and Bahaghar.

With continuous persuasion by STR management and support from District Administration, the villagers of two tribal settlement at Upper Barakamuda (22 families) and Bahaghar (10 families) in the core area of Similipal Tiger Reserve have been relocated and shifted to Asankudar village under Thakurmunda Tahasil outside STR on 07.12.2013. In these two settlements, people of *Khadia* tribe had settled after creation of the Tiger Reserve about 40 years back without any revenue status. The villagers of Upper Barakamuda and Bahaghar settlement villages submitted application on dated 30.03.2013 and 13.04.2013 respectively desiring to be resettled at a location selected by them at Asankudar village under Thakurmunda Tahasil. *Palli Sabha* was held on 14.11.2013 where the villagers gave their consent to be relocated to the site selected by them in Asankudar village. All the villagers opted to avail Option-I package of NTCA. Though as per NTCA guidelines, Option-I beneficiaries are liable to get the package amount of Rs. 10 lakh without further rehabilitation process by govt., however, apart from the package amount,, they had been promised to provide 10 Decimal homestead land to each family in the resettled village and one house under *Mo Kudia* scheme of State Govt by District Administration. Joint family survey was

conducted on 18.11.2013 by Revenue and Forest officials where 22 families of Upper Barakamuda and 10 families of Bahaghar settlement were identified as per guidelines of National Rehabilitation and Resettlement Policy-2007. Their rights under FRA were settled following due procedure in the DLC meeting held for the purpose on 19.11.2013. Then in coordination with District Administration the process of their relocation was initiated and the matter was discussed in the Project Level Rehabilitation and Resettlement Committee meeting held on 22.11.2013. All the families of these two settlements were shifted to the resettlement site at Asankudar on 07.12.2013. One house to each family has been allotted under *Mo Kudia* Scheme of State Government for which the required amount have been deposited in the S.B. Account of each beneficiaries. Each family have already been allotted 10 decimal homestead land and the RoR of the said plots have been issued to them. After relocation, immediately the package amount of Rs.10.00 Lakhs each has been given to the families, as promised in the *Palli Sabha* meeting. Out of the package amount Rs.8.50 Lakhs have been kept in fixed deposit in a nationalized bank for obtaining income through interest generated and Rs.1.5 Lakh in S. B. Account of each family to meet the current expenses.

4.2 Post-relocation development.

1. Health and *Anganwadi* facilities are being provided to the villagers. One *Anganwadi* Centre has started functioning in the village.
2. Tube well and five solar street lights have been installed
3. BPL cards and job cards under MGNREGA have been provided to each family.
4. Other development works in the resettlement colony such as improvement of approach road, creation of village pond under MGNREGA, guard walls and tree planting etc are going on.
5. Day to day post-relocation monitoring is being done by a Sub-divisional Committee headed by the Sub-Collector, Karanjia.
6. Handholding support to the villagers for enhancing their livelihood opportunities is being provided by engaging one NGO "Indian Grameen Services".

4.3 Settlement of rights of Jenabil villagers under FRA.

The villagers of Jenabil village in core area of Similipal Tiger Reserve had been relocated completely in 2010 and resettled at Ambdiha Resettlement Colony outside the tiger reserve. But their rights under FRA had not been settled before their relocation which is a statutory requirement for which, the package amount towards settlement of rights of 40 families under Option-II package was pending for payment till 2013. To sort out the problem, with support from District Administration FRA process of the villagers was completed in 2013, their rights were settled and the pending package amount were paid to all the beneficiaries.

05. ECO-TOURISM.

Similipal Tiger Reserve remains open for tourists from November to June every year. This year due to severe cyclonic storm "Phailin" in October, 2013 road communication inside the reserve was severely disrupted. After restoration of communication, the park was opened for visitors from 13th November, 2013 to 30th June, 2014. In spite of the cyclone "Phailin" the visitor inflow was encouraging except for overseas visitors probably due to restrictions imposed by Government on movement of foreigners in Primitive Tribal group areas. Sighting of animals have been improved on tourist routes. Visitors have encountered leopards several times near Chahala. There was also one sighting of tiger by tourists on Chahala – Brundaban road.

5.1 New Initiatives.

1. Four numbers of double bedded tented accommodations have been provided for tourists at Jamuani.
2. Departmentally operated 14- seated minibus made available for tourists on package.
3. Vegetarian cooked food was made available for day visitors at Barehipani through three women SHGs of that area. With support from District Administration, 15 members of those SHGs were given catering training and funding support had been provided to the groups to run the facilities initially.
4. Cooked food was also made available to the visitors staying at Jamuani through local Eco Development Committee members. Requisite training and facilitations were made to the EDC members through a NGO "Indian Grameen Services".
5. Trekking route developed for visitors at following places
 1. Brundaban to Chahala and back over 6 km.
 2. Jamuani to a nearby waterfall and back over 5 km.
6. Bird watching trips organized on demand from Gurguria, Jamuani, Jashipur and Pithabata
7. A modern Interpretation Centre developed at Ramatirtha with technical support of CEE, Ahmedabad, was opened for visitors.
8. Souvenir shops opened at Ramatirtha, Jashipur and Pithabata entry gate. Local artifacts made of bamboo and *Sabai* grass displayed for sale. Souvenir items like visual coffee mugs and picture post cards with Similipal themes were also sold to visitors apart from caps and T-shirts.
9. There are seven numbers of check gates on the entry and exit routes of tourists. Close Circuit cameras have been installed this year at 4 check gates to monitor the visitors entry and exit.
10. Visitors feedback registers have been kept at booking counters and facility have been made for online register of complaint/ feedback.

11. To facilitate timely issue of permission by District Administration for entry of foreign tourists, online application facilities have been started at STR headquarters to avoid delay.
12. Eco-stay facility with bamboo cottages is being developed at Kumari and Jamuani which will be operated by local EDC.

5.2 Visitor Profile.

Year	Indian	Foreigner	Total	Revenue collected in Rs.
2011-12	13709	83	13792	1336450
2013-13	24452	43	24495	2038052
2013-14	23900	29	23929	2837250

5.3 Devkund.

During the year 77596 tourists visited this scenic spot having religious significance situated in the buffer area of Similipal Tiger Reserve. Revenue to the tune of Rs. 3,37,700/- was earned towards entry fee of 6476 nos of vehicles.

5.4 Ramatirtha.

72276 day visitors visited Ramatirtha during the year. An Interpretation Centre developed at Ramatirtha in technical collaboration with CEE, Ahmedabad was inaugurated and opened for visitors by Sri S. S. Srivastava, IFS, Principal C. C. F. (Wildlife) and Chief Wildlife Warden, Odisha on 23-02-2014.

5.5 Similipal Ecotourism Society.

12th General Body meeting of Similipal Ecotourism Society (SES) was held on 19.06.2014 at Conference Hall of FD, STR & RCCF, Baripada under the chairmanship of Field Director, STR & Regional C.C.F., Baripada.

The income of the Society during 2013-14 was Rs. 13,77,959/- and the source was mainly from entry fee, accommodation charges and bank interest. An amount of Rs. 62, 23, 474/- was available with the SES at the end of 30th June, 2014. An amount of Rs. 8,25,433/- was spent during 2013-14 for the following activities.

- Decorative fencing work at Joranda water fall.
- Reimbursement of cost of medicine of field staff
- Purchase of furniture for tented accommodation at Jamuani
- Fixation of signages

- Preparation of souvenir items like visual coffee mugs, picture post cards, caps and t-shirts.
- Construction of water tank at jamuani tourism complex.
- Maintenance at Ramatirtha and Khairi Niwas complex.
- Renewal charges of Similipal website.

Following important decisions were taken in the 12th General Body meeting of SES.

1. Approval of work programme of SES for 2014-15 to the tune of Rs.40,86,600/-
2. Proposal of reconstitution of General Body of SES
3. Renewal of lease of Ramatirtha and Gurguria ecotourism complex to T. K. Internationals Pvt. Ltd. for another two years.

06. FRIENDS OF SIMILIPAL TIGERS.

This programme was started in July, 2012 to create a group of volunteers from among the schools and colleges around the Tiger Reserve. The activities taken up under this programme during this year are highlighted below.

- 30 nos of new High Schools along with existing 6 High Schools were involved in the programme.
- Similarly 5 new colleges along with existing 4 colleges were involved in the programme.
- 500 nos applications were received from 45 institutions for enrolment as volunteers.
- Three nature camps were organized at Chahala on dated 21.07.2013, 28.07.2013 and 03.09.2013 respectively where 64 volunteers of "Friends of Similipal Tigers" along with 15 teachers from 8 schools participated.
- On 08.09.2013 an interactive workshop was organized at DRDA, conference hall, Baripada for all the volunteers of "Friends of Similipal Tigers" where 75 participants from 9 schools participated.
- Inter school quiz competition organized on 06.10.2013 on the occasion of Wildlife Week.
- Essay competition organized among the volunteers of "Friends of Similipal Tigers" on 20th June, 2014 on the occasion of International Biological Diversity Day.
- An interaction programme was organized for the volunteers of "Friends of Similipal Tigers" with 37 students and 6 teachers of Aurovinda Convent School, Bhubaneswar during their field trip to Similipal Tiger Reserve on 07.01.2014.
- Similarly an interaction programme was organized for the volunteers of "Friends of Similipal Tigers" with 32 students and 6 teachers of Li Martiniers Girls College of Lucknow during their field trip to Similipal Tiger Reserve on 09.01.2014.

07. DEVELOPMENTAL ACTIVITIES.

1. Construction of Range Office of Pithabata WL Range at Pithabata under CAMPA 12-13 at a cost of Rs.11.00 lakh
2. Construction of Range Office of National Park Range at Jashipur under CAMPA 12-13 at a cost of Rs.11.00 lakh
3. Construction of barrack at Pithabata under CAMPA 12-13 at a cost of Rs.10.87 lakh
4. Construction of barrack at Jashipur under CAMPA 12-13 at a cost of Rs.10.87 lakh

5. Construction of Range Officer's residence at Pithabata under CAMPA 12-13 at a cost of Rs.8.68 lakh
6. Construction of Forester's quarters at Bhajam under CSP-STR at a cost of Rs.5.00 lakh
7. Construction of Forester's quarters at Hatisal under CSP-STR at a cost of Rs.5.00 lakh
8. Construction of forester's quarters at Barehipani under CAMPA 12-13 at a cost Rs.6.65 lakh
9. Construction of Forest Guard quarters at Pithabata under CAMPA 12-13 at a cost of Rs.4.80 lakh
10. Construction of Forest Guard quarters at Namti under CAMPA 12-13 at a cost of Rs.4.80 lakh
11. Construction of Forest Guard quarters at Digdiga under CAMPA 12-13 at a cost of Rs.4.80 lakh
12. Construction of Forest Guard quarters at Baunskhal under CAMPA 12-13 at a cost of Rs.4.80 lakh
13. Construction of Forest Guard quarters at Gunduria under CSP-STR at a cost of Rs.4 lakh.
14. Construction of Forest Guard quarters at Silda under CSP-STR at a cost of Rs. 4 lakh.
15. Construction of Anti-poaching shed at Nigirdha under CAMPA WL 12-13 at a cost of Rs.4.00 lakh
16. Construction of Anti-poaching shed at Purunapani under CAMPA WL 12-13 at a cost of Rs. 4 lakh.
17. Construction of kennel for dog squad at Nigirdha under CSP-STR at a cost of Rs. 8 lakh.
18. Construction of office of ACF, STPF and 30-men barrack with mess for STPF at Gurguria under CSP_STR at a cost of Rs. 32 lakh.
19. Construction of e-Green watch control room under CAMPA 12-13 at STR headquarters at a cost of Rs.2.30 lakh
20. Seven nos of dug wells/ tube wells under CSP-STR at a cost of Rs.7.00 lakh.
21. Creation of water body in Pithabata WL Range under State Plan at a cost of Rs 5 lakhs.
22. Reconstruction of wooden bridge on Budhabalanga river near Nawana (Jambu bridge) under CSP-STR at a cost of Rs.1.50lakh
23. Installation of Close Circuit cameras at 4 check gates under CSP-STR at a cost of Rs.5 lakhs.
24. Construction of 10 nos of surface causeways on forest roads under CAMPA 12-13 at a cost of Rs. 8 lakh.
25. Development of meadows over 8.9Ha under CSP-STR at a cost of Rs.5.00 lakh
26. Development of meadow over 37Ha under CAMPA WL at a cost of Rs.7.57 lakh
27. Establishment of a Mobile Veterinary Service (MVS) unit for Similipal landscape at Pithabata under CSP-STR at a cost of Rs. 20 lakh.
28. Up gradation of Forensic Lab. at STR headquarters under CSP-STR at a cost of Rs. 10 lakh.
29. Up gradation of GIS Laboratory at STR headquarters at a cost of Rs. 10 lakh.
30. Procurement of one Mahindra Scorpio vehicle for Field Director under CSP-STR at a cost of Rs.11.59213 Lakh
31. Procurement of one Mahindra Bolero vehicle under CSP-STR at a cost of Rs. 6.00885Lakh
32. Procurement of two Mahindra Thar vehicles for STPF under CSP-STR at a cost of Rs.10.02638Lakh
33. Installation of 60 solar street lights in Similipal villages under IAP at a cost of Rs.23.94lakh
34. Steel fencing at Barehipani fall view under IAP at a cost of Rs. 4.65lakh
35. Decorative parapet fencing at Joranda fall view under SES funding at a cost of Rs. 3 lakh.
36. Construction of four tented accommodation at Jamuani tourists complex under SES funding at a cost of Rs.7.20lakh.
37. Construction of bamboo cottages at Kumari for Eco-village for tourists under IAP at a cost of Rs.12.00lakh
38. Construction of Conference Hall of Field Director, Similipal Tiger Reserve and RCCF, Baripada at a cost of Rs.9,26,000/-

08. ALLOTMENT & EXPENDITURE IN 2013-14.

Scheme	Allotment released in Lakh Rs.	Expenditure in Lakh Rs.
CSP-Project Tiger	712.59	712.59
Non-plan (Works)	8.08	8.08
State Plan	29.67	29.67
CAMPA 12-13 APO	112.15	82.15
CAMPA WL 12-13 APO	92.4	72.22
IAP	27.59 (2012-13- Rs.56.78)	50.93

09. RESCUE AND RELEASE OF WILD ANIMAL.

SL. No.	Name of The Division	Range	Place of Rescue	Date of rescue	Date of Rehabilitation	Place of Release	Name of Animals
1)	Baripada	Pithabata	Station Bazar, Baripada	08.07.2013	08.07.2013	Bhuasuni RF	Chameleon
2)	Baripada	Pithabata	Near Meghasani Hotel	09.07.2013	09.07.2013	Bhuasuni RF	Chameleon
3)	Baripada	Pithabata	Station Bandha Sahi, Baripada	10.07.2013	10.07.2013	Manchabandha RF	Indian Cobra
4)	Baripada	Pithabata	Naharpada, Baghraroad	11.07.2013	11.07.2013	Manchabandha RF	Russell's Viper
5)	Baripada	Pithabata	Dhipasahi, Baripada	12.07.2013	12.07.2013	Manchabandha RF	Indian Cobra
6)	Baripada	Pithabata	Gangraj	01.08.2013	01.08.2013	Budhikhamari RF	Indian Cobra
7)	Baripada	Pithabata	Jhingri Bandha Sahi, Bpd	02.08.2013	02.08.2013	Budhikhamari RF	Indian Cobra
8)	Baripada	Pithabata	Tentulidinda village	05.08.2013	05.08.2013	Budhikhamari RF	Common Indi. Krait
9)	Baripada	Pithabata	Baghagali, Bhanjpur	09.08.2013	09.08.2013	Manchabandha RF	Russell's Viper
10)	Baripada	Pithabata	KC Circle, Baripada	10.08.2013	10.08.2013	Manchabandha RF	Russell's Viper
11)	Baripada	Pithabata	Gangraj village	14.08.2013	14.08.2013	Balidiha RF	Indian Cobra
12)	Baripada	Pithabata	Bhanjpur	18.08.2013	18.08.2013	Balidiha RF	Indian Cobra
13)	Baripada	Pithabata	Bhugudakata, Baripada	19.08.2013	19.08.2013	Balidiha RF	Indian Cobra

14)	Baripada	Pithabata	Sungadia	04.09.2013	04.09.2013	Manchabandha RF	Indian Cobra
15)	Baripada	Pithabata	Belgadia, Baripada	05.09.2013	05.09.2013	Manchabandha RF	Indian Cobra
16)	Baripada	Pithabata	All India Radio Station	06.09.2013	06.09.2013	Manchabandha RF	Chameleon
17)	Baripada	Kaptipada	Uperbaradangua	10.09.2013	15.09.2013	Chahala (STR)	Wild boar
18)	Baripada	Pithabata	Murgabadi	21.09.2013	21.09.2013	Manchabandha RF	Chameleon
19)	Baripada	Pithabata	Ambika Mandir Sahi	11.10.2013	11.10.2013	Manchabandha RF	Indian Cobra
20)	Baripada	Pithabata	Manchabandha village	12.10.2013	12.10.2013	Purunapani RF	Chameleon
21)	Baripada	Pithabata	Station Bazar, Baripada	16.10.2013	16.10.2013	Purunapani RF	Russell's Viper
22)	Baripada	Pithabata	Jyotipur School	19.10.2013	19.10.2013	Purunapani RF	Indian Cobra
23)	Baripada	Dukura	Near the village of Chandanpur inside the bush	21.10.2013	21.10.2013	Released near Sapanchua in Subarnamanjari Natural forest area.	Rusty Spotted cat
24)	Baripada	Bangriposi	Near Rajaloka Railway Station	21.10.2013	21.10.2013	Bidhubhandar PRF	Python-1no.
25)	Baripada	Bangriposi	Inside paddy field near Jamdopal	29.10.2013	29.10.2013	Bidhubhandar PRF	Python-1no.
26)	Baripada	Udala	On the road near Dhanghera Chhaka	02.11.2013	03.11.2013	Similipal RF Compartment No.ED-08	Sand Boa
27)	Baripada	Udala	Inside Udala Town	07.11.2013	07.11.2013	Similipal RF Compartment No.SJ-18	Hanuman Langur
28)	Baripada	Udala	Pond-Udala Town	19.11.2013	19.11.2013	Similipal RF Compartment No.TK-11.	Female Sambar
29)	Baripada	Udala	House and premises of Sardip Sahu of Badaolia, PS-Khunta	25.11.2013	28.11.2013	Range Office Upper Barha Kamuda	Barking deer
30)	Baripada	Udala	Inside Angarpada Village	28.11.2013	28.11.2013	-	Sambar
31)	Baripada	Udala	Badodha Haribansha sahi near Arpata-Remuna road	30.11.2013	03.12.2013	Similipal RF Compartment No.ED-08	Banded Krait
32)	Baripada	Pithabata	Sindurgoura village	30.11.2013	30.11.2013	Similipal RF	Sambar
33)	Baripada	Pithabata	Ambika Mandir Sahi	02.12.2013	02.12.2013	Purunapani RF	Indian Cobra

34)	Baripada	Pithabata	Station Bandha Sahi	08.12.2013	08.12.2013	Purunapani RF	Indian Cobra
35)	Baripada	Pithabata	Bhanjpur, Baripada	26.12.2013	26.12.2013	Manchabandha RF	Indian Cobra
36)	Baripada	Pithabata	Convent School, Baripada	28.12.2013	28.12.2013	Balidiha RF	Indian Cobra
37)	Baripada	Pithabata	Near Rangamatia Chhaka	22.01.2014	22.01.2014	Similipal RF	Parakeets and Giant Squirrel.
38)	Baripada	Udala	House and its premises of Sri Durgasankar Padhi, Udala, W.No.7	05.02.2014	05.02.2014	Udala RF near Sinduramundi Thakurani	Binocellate Cobra
39)	Baripada	Pithabata	Darogadahi Chhaka, Baripada	21.02.2014	21.02.2014	Budhikhamari RF	Indian Cobra
40)	Baripada	Pithabata	Bhugudakata, Baripada	22.02.2014	22.02.2014	Purunapani RF	Indian Cobra
41)	Baripada	Pithabata	Fire Station, Baripada	27.02.2014	27.02.2014	Balidiha RF	Russell's Viper
42)	Baripada	Udala	Deula V.P. School near Khunta	13.03.2014	13.03.2014	Inside Udala RF	Barn owl
43)	Baripada	Udala	Ambadiha	29.04.2014	29.04.2014	Similipal	Indian Gaur
44)	Baripada	Udala	Inside Govt. Girls High School campus, Udala	02.05.2014	02.05.2014	Inside Udala RF	Indian Trinket Snake
45)	Baripada	Bangriposi	Inside house of Lalbihari Mohanty Kanshapal	29.05.2014	29.05.2014	Bidhubhandar PRF	Python-1no.
46)	Baripada	Bangriposi	Inside house premises of Sudhakara Behera, Chandanpur	30.05.2014	30.05.2014	Bidhubhandar PRF	Python-1no.
47)	Baripada	Udala	Udala NAC near Trishakti cinema hall	02.06.2014	02.06.2014	Inside Udala RF near Central Nursery	Chameleon
48)	Baripada	Pithabata	LIC Colony, Baripada	18.06.2014	18.06.2014	Manchabandha RF	Russell's Viper
49)	Baripada	Bangriposi	Near Katra river Kanshapal village	24.06.2014	24.06.2014	Bidhubhandar PRF	Python-1no.
50)	Karanjia	Gudgudia	Jashipur	15.07.2013	15.07.2013	Badampahad RF	Indian Cobra
51)	Karanjia	Thakurmunda	Near Akhapalan Nala Karanjia	18.07.2013	19.07.2013.	Similipal RF SL-1	Chameleon

52)	Karanjia	Karanjia	Near Mangala Mandir	16.10.2013	16.10.2013	L. Barhakamuda, Compt. No.WD-5	Chameleon
53)	Karanjia	Thakurmunda	Budhichua Nala	03.11.2013	03.11.2013	Jorram Nala Tingiria Pahad	Marsh Crocodile
54)	Karanjia	Karanjia	Raruan	14.03.2014	14.03.2014	Paudia RF	Banded Krait
55)	Karanjia	Karanjia	Karanjia Range Office campus	12.06.2014	Under treatment	Under treatment	Flying Squirrel
56)	Karanjia	Karanjia	Karanjia near Kundakhai nala	22.06.2014	27.06.2014	Kalakada RF of Kadadiha	Banded Krait
57)	Rairangpur	Rairangpur	Rairangpur Rural Police Station, Badamtalia	03.07.2013	10.07.2013	Chahala	Peacock
58)	Rairangpur	Rairangpur	Gundurua village	07.07.2013	09.07.2013	Badampahar PRF	Flying Squirrel
59)	Rairangpur	Bisoi	Bisoi	11.07.2013	11.07.2013	Bidhubhandar P.R.F.	Indian Python
60)	Rairangpur	Bisoi	Bangriposi	17.07.2013	17.07.2013	Bidhubhandar P.R.F.	Rhesus Monkey
61)	Rairangpur	Bisoi	Gargadi	23.07.2013	23.07.2013	Bidhubhandar P.R.F.	Indian Python
62)	Rairangpur	Badampahar	Rakha Sahi in Suleipat Section	26.07.2013	26.07.2013	Similipal R.F.	Indian Python
63)	Rairangpur	Bisoi	Kuajhari	26.07.2013	26.07.2013	Bidhubhandar P.R.F.	Sand Boda
64)	Rairangpur	Bahalda	Gambharia R.F.	02.09.2013	03.09.2013	Gombharia P.R.F.	Indian Cobra-5nos Monocled Cobra-1no, Common Gran-1no.
65)	Rairangpur	Bisoi	N.H.-49 near Bangriposi village	25.09.2013	27.09.2013	Similipal Tiger Reserve	Rhesus Monkey
66)	Rairangpur	Bisoi	Pathar Khan village	26.09.2013	26.09.2013	Bidhubhandar P.R.F.	Indian Cobra
67)	Rairangpur	Bisoi	Dwarswani village	30.09.2013	30.09.2013	Argarbindha R.F.	Elephant baby
68)	Rairangpur	Bisoi	Khodiasole	20.10.2013	20.10.2013	Bidubhandar P.R.F.	Indian Python
69)	Rairangpur	Bisoi	Bangriposi Checkgate	05.01.2014	20.06.2014	Chahala	Parakeets-4nos.
70)	Rairangpur	Manada	Mesin Nala near forest road	23.04.2014	08.06.2014	Chahala	Common Langur

10. MOBILE VETERINARY SERVICE (MVS) UNIT FOR SIMILIPAL.

A Mobile Veterinary Service (MVS) Unit has been launched in April 2014 in collaboration with Wildlife Trust of India to facilitate rescue of wild animals in Similipal landscape. The unit is located at Pithabata manned by trained veterinarian and caretaker with a dedicated rescue vehicle to attend to wildlife emergencies reported from the region. The MVS will also create awareness amongst the local villagers on how to deal with and respond to different conflict scenarios. They will also impart training to the field staff of forest and other departments on dealing with man-animal conflict and rescue and rehabilitation basics. One Common Palm Civet and another Flying Squirrel were under the treatment at rescue centre during the period. The mongoose is now ready for soft release in the wild. The captive elephants were treated periodically by the MVS unit at Gudgudia. The unit was always present along the side of anti-depredation squad for elephant driving operations.

11. REWARDS AND RECOGNITIONS.

- The effort made by the tiger reserve management in bringing normalcy in the naxal striven park has been recognised nationally. Similipal Tiger Reserve has been conferred with “Earth Hero, 2013” award under “Earth Guardian” category by Royal Bank of Scotland Foundation-India for the commendable efforts to protect biodiversity in the face of severe challenges and constraint
- Sri Batakrushna Padhi, Range Officer, Dukura Range of Baripada Division has been awarded with State Forestry Award, 2013 as Best Forest Ranger.
- Sri Ghanashyam Mohanta, Ex-Range Officer, Bisoi Range of Rairangpur Division has been awarded with State Forestry Award, 2013 as Best Forest Ranger.
- Sri Shiba Sankar Samal, Forester, Bhanjabasa Section under Upper Barakamuda Range of Similipal Tiger Reserve (Core) has been awarded with State Forestry Award, 2013 as Best Forester.
- Sri Buluram Tudu, Protection Assistant of Digdiga Anti-poaching camp under Pithabata Wildlife Range of Similipal Tiger Reserve (Core) has been felicitated by an Organisation “Aranyani” in a State level function at Bhubaneswar due to his outstanding performance in protection in Similipal Tiger Reserve.

12. STAFF WELFARE.

- Family hostels with 4 quarters at Baripada and 3 quarters at Jashipur have been allotted to the staff working in the core area for accommodation of their families.
- Mosquito nets and leech guards have been provided to all the staff and daily wage protection assistants working in core area.
- Special health camps for core area staff have been organized and blankets supplied to the daily wage protection assistants working in core area in collaboration with outside organisations.
- Reimbursement of medical expenses of core area staff associated with eco-tourism activities being done out of Similipal Ecotourism Society fund.
- Facilitation of medical treatment of core area staff at District Headquarters Hospital, Baripada being done by STR Headquarters.

13. VISIT OF VIPs.

Date of visit	Names of VIP visitors
04.07.2013	Mrs. Sarajini Hembram, Hon'ble Minister of Textile and Handloom.
21.12.2013 & 22.12.2013	Hon'ble Shri Justice A. K. Goel, Chief Justice, Odisha High Court Hon'ble Shri Justice R. K. Lodha, Justice, Supreme Court of India
25.12.2013	Rabindra Patra, Director, Ministry of Health and Family Welfare, New Delhi.
30.12.2013 to 31.12.2013	Mr. Sushansu Mohanty, Addl. Secretary and Financial Advisor, MOEF, Govt. of India, New Delhi.
31.12.2013	S. P. Yadav, DIG, National Tiger Conservation Authority, New Delhi.
06.01.2014	S. K. Rathoo, IFS, Special Secretary.
06.01.2014	S. H. Majhi, Under Secretary to Govt. of India.
12.01.2014	Mr. Manish Agarwal, IAS probationer.
23.01.2014	Mr. Varun Kapoor, IPS, IGP and Director, Police Radio Training School, Indore.
24.01.2014	Dr. Shekhar Kumar Niraj, IFS, Head TRAFFIC India.
15.02.2014	Arthabandhu Patra, IRS, Commissioner of Income Tax, Bhubaneswar.
24.02.2014	Shri S. S. Srivastava, IFS, Principal Chief Conservator of Forests (WL) and Chief Wildlife Warden, Odisha
03.03.2014	Dr. A. J. T. Johnsing, Eminent Wildlife Expert
17.03.2014	P. R. Saha, IAS, Member of Board of Revenue, Cuttack, Odisha.
18.04.2014 & 19.04.2014	Mr. Milostav Stasek, Ambassador of The Czech Republic.
21.04.2014 & 23.04.2014	Dr. Rajesh Gopal, IFS, ADG (WL) & Member Secretary, National Tiger Conservation Authority (NTCA) Dr. Himmat Singh Negi, IFS, IG, NTCA
25.04.2014	A. K. Singh, Asst. Director, Tourism, Govt. of India.
06.05.2014 to 09.05.2014	NTCA Committee constituted for Management Effectiveness Evaluation consisting of: Dr. Jagdish Kishwan, IFS (Retd.), Chief Advisor, WTI Shri Prasenjit, Navgire, Independent Researcher Shri Subhranjan Sen, IFS, Scientist, Wildlife Institute of India, Dehradun Shri R. Govekar, IFS, AIG, NTCA, Nagpur.
07.05.2014 to 08.05.2014	Dr Mathur and Shri Shivakumar AIG, NTCA
10.05.2014	Dr. S. Satpathy, Director Climate change Division of MOEF, New Delhi.
14.06.2014	P. K. Dash, IRS, Commissioner of Income Tax, Cuttack.

14. PHASE-IV TIGER MONITORING.

14.1 Monitoring of Prey Population.

A 3 day transect line survey was conducted in November 2013 and March 2014 in 177 transect lines covering core in addition to buffer area over entire landscape of 2750 sq km of Similipal Tiger Reserve (STR) for relative abundance of prey species. The division wise no. of units are: STR Core- 73 units, Baripada- 28 units, Karanjia- 48 units and Rairangpur- 28 units. Training was imparted to all field forest staffs prior to conducting the census.

During survey period prey species were encountered along the transect lines like Sambar, Chital, Barking deer, Wild pig, Common langur, Rhesus macaque, Indian gaur, Giant squirrel, Pea fowl, Cattle, Hare and Elephant. The estimated over all prey population density was calculated for the STR- Core based on software DISTANCE 6.0. The prey density was found to be 28.9/Km² in post monsoon seasons (November 2013) and 33.6/Km² in pre monsoon seasons (March 2014). It was observed that highest prey population is found in Jenabil and UBK followed by Nawana (N), National Park, Nawana (S), Chahala and Pithabata range. The prey population profile of STR is getting improved and is much higher than observed in last year monitoring. Available prey density is minimal in buffer area of tiger reserve. Prey density was found to be 21/Km² in Karanjia followed by 17/Km² in Rairangpur and 14.9/Km² in Baripada division during post monsoon seasons (November 2013). Similarly in March 2014 (Pre monsoon), prey population was estimated and found to be 16.1/Km² in Karanjia followed by 13/Km² in Rairangpur and 10.6/Km² in Baripada division.

14.2 Monitoring through Carnivore Signs Survey.

Carnivore sign survey was conducted during November 2013 and March 2014 in 177 units covering both core and buffer areas. The division wise break up of units are: STR Core- 73 units, Baripada- 28 units, Karanjia- 48 units and Rairangpur- 28 units. A total 521 and 601 carnivores signs were encountered in November 2013 and March 2014 respectively. Out of which 120 leopard and 24 tiger scats were obtained during November 2013 and 83 leopard and 44 tiger scats were encountered in March 2014 census. The direct or indirect evidence of carnivores like Tiger, Leopard, Jungle cat, Wolf, Jackal, Hyena, Sloth bear were encountered. In post monsoon survey November 2013, highest carnivore signs (n = 278) were observed in STR- Core followed by Karanjia (n = 128), Rairangpur (n = 62) and Baripada (n = 53). Similarly in pre monsoon survey March 2014, highest carnivore signs (n = 279) were observed in STR- Core followed by Karanjia (n = 167), Rairangpur (n = 87) and Baripada (n = 68). However, 79 tiger signs encountered in STR- Core followed by 4 signs in Baripada, 3 signs in Rairangpur and one sign in Karanjia, which is quite high in number compared to last year study.

14.3 Camera Trap Study.

Based on previous camera trap exercise in Similipal Tiger Reserve (STR) core as well as Buffer, the potential Tiger Landscape area was identified and now the camera trap exercise is being carried out in this landscape. Camera was fixed in every second grid cell with an edge length of 2.5 × 2.5 km (5 Km²). A total 126 cameras were installed in 63 locations to cover 318 km² in tiger landscape area. MOULTRIE (D-55 Moultrie Feeders Alabama) passive camera units were initially tested and deployed in the field. Initially data collection was carried out during 51 occasions and 3213 trap nights. Captures-recapture histories were developed for each adult tiger identified in the camera trapping following the methods suggested by Jhala et al., 2010. Photographs of individual tigers were identified from their unique stripe patterns of the coat. Abundance and density of tigers in the study area was estimated by using software MARK 7.0 and Density 4.4.6 (Efford, 2009). The number of estimated tiger density in the effective sample area is 6 to 7 per 100 Km². Analysis of initial photo captured during camera trapping days indicated the presence of other co-predator like leopards, leopard cats, jungle cats, ratel, civet cats, strip necked mongoose and rudy mongoose.



ORGANOGRAM



DR. ANUP KUMAR NAYAK, IFS
F.D., STR-CUM-RCCE, BARIPADA





Forest Police co-ordination meeting at Udala on 07.03.2014



Police training to STPF by Commandant, 5th Battalion on 26.05.2014



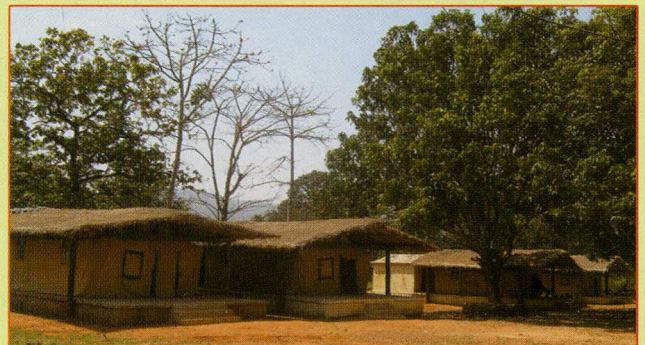
Mobile Veterinary Service Unit at Pithabata-STR



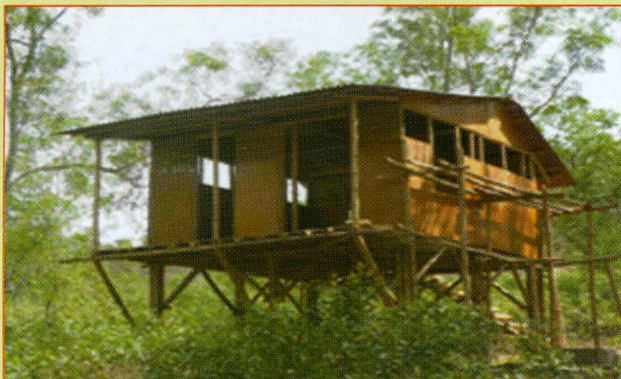
Settlement of rights under FRA for relocated Jenabil villagers on 06.01.2014



Bagha Basa Interpretation Centre at Ramatirtha



Tented accommodation at Jamuani

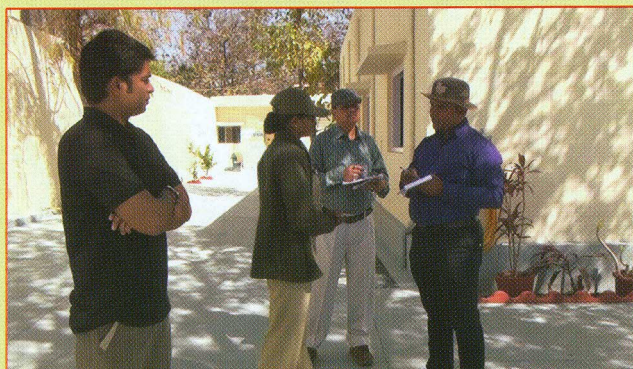


Bamboo hut at Jamuani



Catering facility by SHG for visitors at Barehipani





Exposure visit of staff to Gir National Park from 28.02.2014 to 03.03.2014.



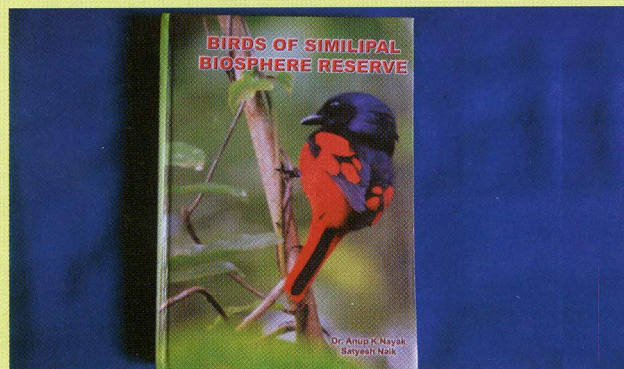
Exposure visit of staff to Jaldapada from 22.02.2014 to 24.02.2014



Quiz competition among school children on 03.10.2013



Field visit of volunteers of Friends of Similipal Tigers on 03.08.2013



Book on Birds of Similipal Biosphere Reserve published



Orthosiphon aristatus - an addition to flora of Odisha

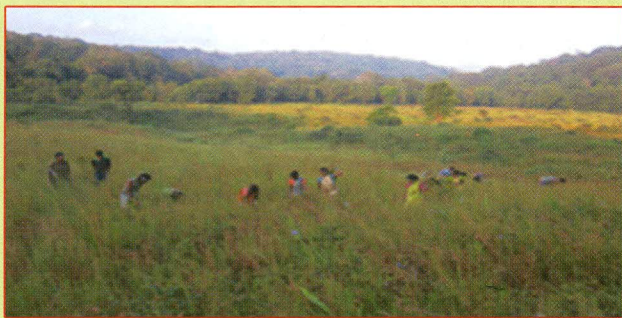


Hand pollination of rare orchid-*Tainia hookeriana*.



Re-introduction of orchids in Similipal

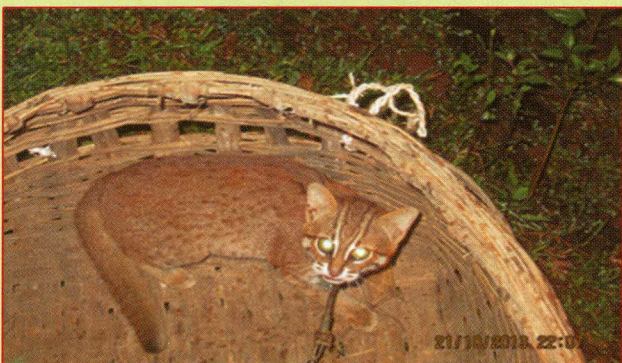




Uprooting of obnoxious weeds at UBK.



Exposure visit to Kanha National Park by staff from 11.09.2013 to 13.09.2013



Rusty spotted cat- 1st report from STR



Seizure of a leopard skin in Pithabata (WL) Range, STR on 07.04.2014



Monsoon patrolling on elephant back in Jenabil



Machans over tree tops in vulnerable areas



A pair of Stripe-necked Mongoose at Hatisal Chhak.



White bellied tube-nosed bat, first record for Odisha.



14.4 Carrying Capacity of Tiger in STR.

Following the method prescribed by Hayward et al., 2007, the carrying capacity of tiger in STR was estimated based on prey biomass profile of the area. Total preferred prey biomass estimated to be $1862.8 \pm 70 \text{ kg/Km}^2$ in STR. The regression equation ($y = -2.158 + 0.377x$) was used to calculate predicted tiger density or tiger carrying capacity of the STR. Which was calculated to be $9.4 \pm 1 / 100 \text{ Km}^2$ (range: 8 to 10).

14.5 Monitoring Tiger Pugmarks in STR.

A total of 78 tiger pugmarks were identified in STR core area in between 2009 and 2013. Out of them 57 pugmarks traced out in UBK range, 19 pugmarks traced in Jenabil range and followed by each pugmark detected in National Park and Nawana (S) range. The highest pugmarks were encountered in morning hours. Pugmarks were analyzed based on their size, time and date of detection and area of encounter routes. However, the tiger paw size may vary from place to place or person to person, who are involved in plaster casting the pugmarks in field (Karanth et al. 2004). Therefore local forest staff concerned was also involved in analysis. Based on tiger paw size, tiger movement and their territory, individual tiger was marked as male and female based on their initial pugmark analysis. So far 19 individual tigers was identified in four ranges and highest 11 tiger marked in UBK, 6 in Jenabil and one each in National Park and Nawana (S) range. Tiger presence also encountered in adjoining area of UBK range like Kaptipada, Kendumundi and Dudhiani range in last Phase IV monitoring. Pugmark of one tiger cub along with her mother was also plaster-casted in UBK range. However, recently staffs also spotted tiger cub in Meghasani area in UBK range. Tiger occupied area map were developed based on their pugmark presence and tallied with those captured from trap cameras.

Size of tiger pugmarks:

Mean length $13 \pm 1.3 \text{ cm}$ (range: 10.5 – 15.6 cm)

Mean breadth $11.4 \pm 1.1 \text{ cm}$ (range: 9.8 – 13.5 cm)

Hind paw of tiger cub size 9 cm x 7 cm in length (Length & Breadth)

All tiger pugmarks were detected in between 760.8 m and 956 m altitude (MSL).

14.6 Individual Tiger Territory Monitoring in STR.

The individual tiger range analysis was carried out in STR through capture-recapture method in camera trapping analysis. Initially, 25 individual tigers were identified based on their unique stripe patterns in pre-identified 318 Km^2 camera trapping area covering UBK, Jenabil, NP and Kendumundi range. Out of which 4 are male tigers and remaining 21 (Two male tiger cubs spotted with their mother recently) tigers are female. All individual tigers were numbered from SI-1 to SI-25. Maximum tigers are captured in UBK range, which corroborates the pugmark monitoring results. Initial tiger monitoring results show that 10 tigers are captured in single camera trap locations followed by 7 tigers are re-captured in double camera trapping locations and also 8 tigers re-captured in multiple camera trapping locations. The double re-captured Individual tiger averagely moved 2.4 km in distance from initial capture point to next nearest recapture point with minimum range 0.3 km to maximum range 5.1 km in distance. Tiger captured in multiple camera trapping locations portray that individual tiger occupied mean home range area of 23 km^2 with minimum area of range occupied 0.5 km^2 to maximum range 82.8 km^2 area. Camera trapping will continue in other areas as well to identify resident as well as transients occupying those areas.

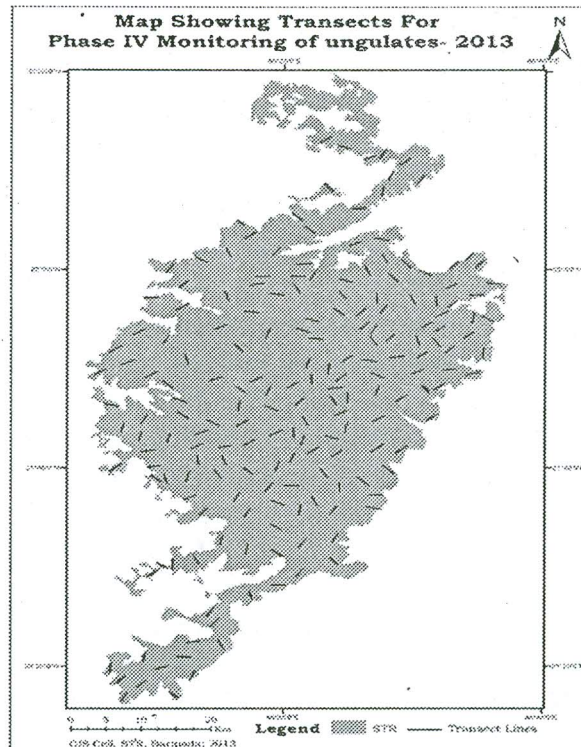


Fig.1: Map of Similipal Tiger Reserve, Odisha, and showing line transects.

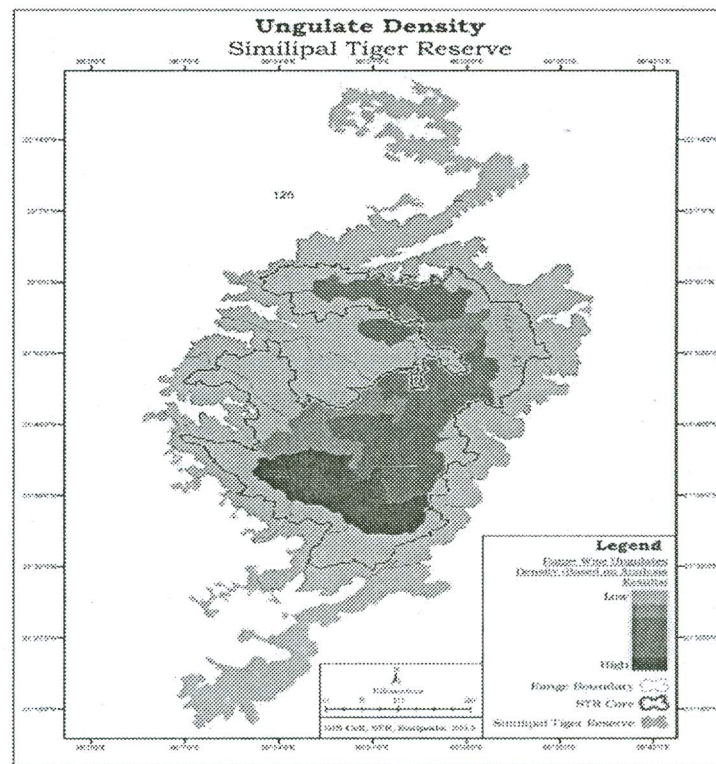


Fig.2: Density profile of ungulates from low range to high range in STR.

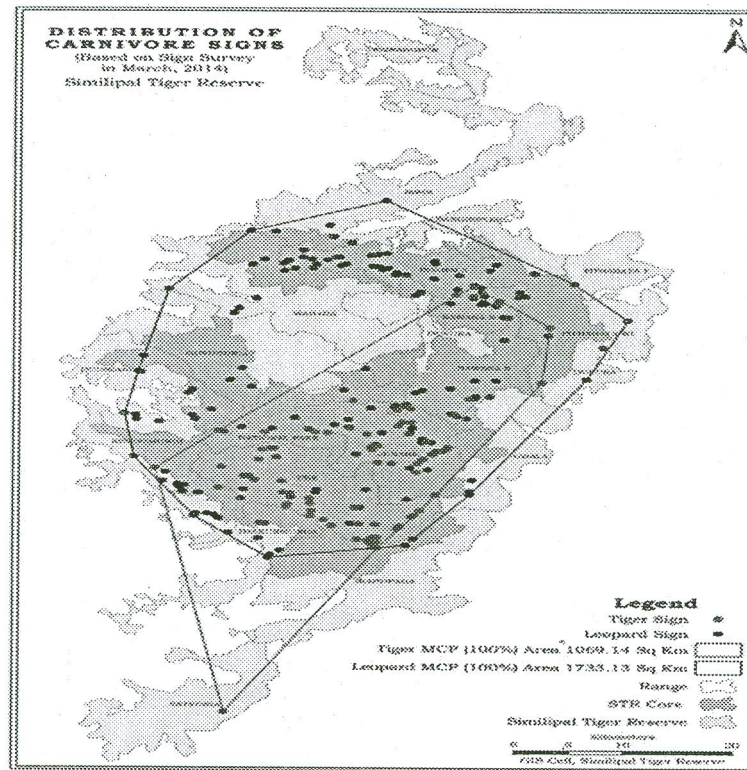


Fig.3: Showing the tiger & leopard occupied area (MCP 100%) in STR during March, 2014.

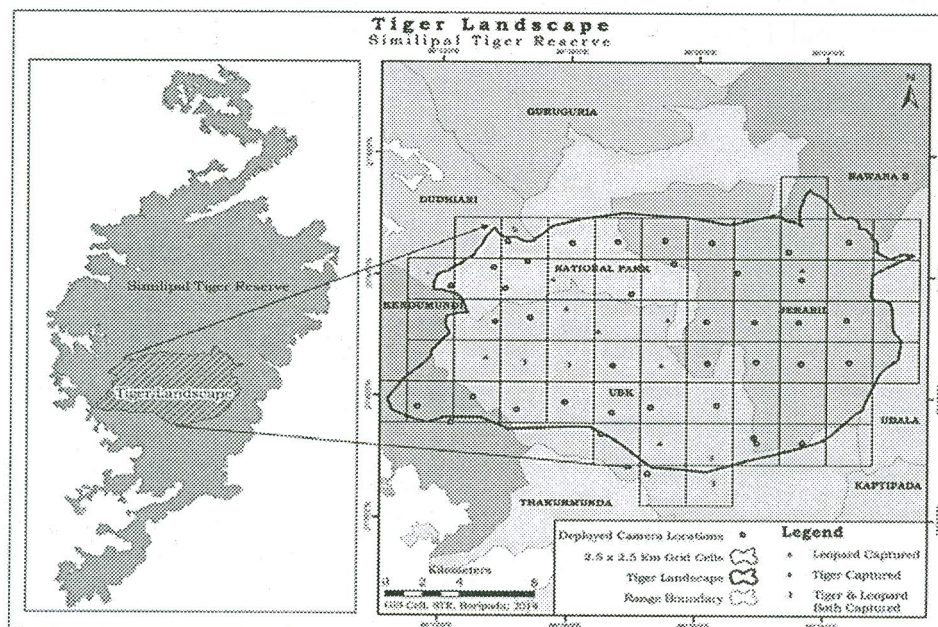


Fig. 4: Identified Tiger Landscape area where tiger and leopard captured in 2.5x2.5 grid cell in 318 km² area.

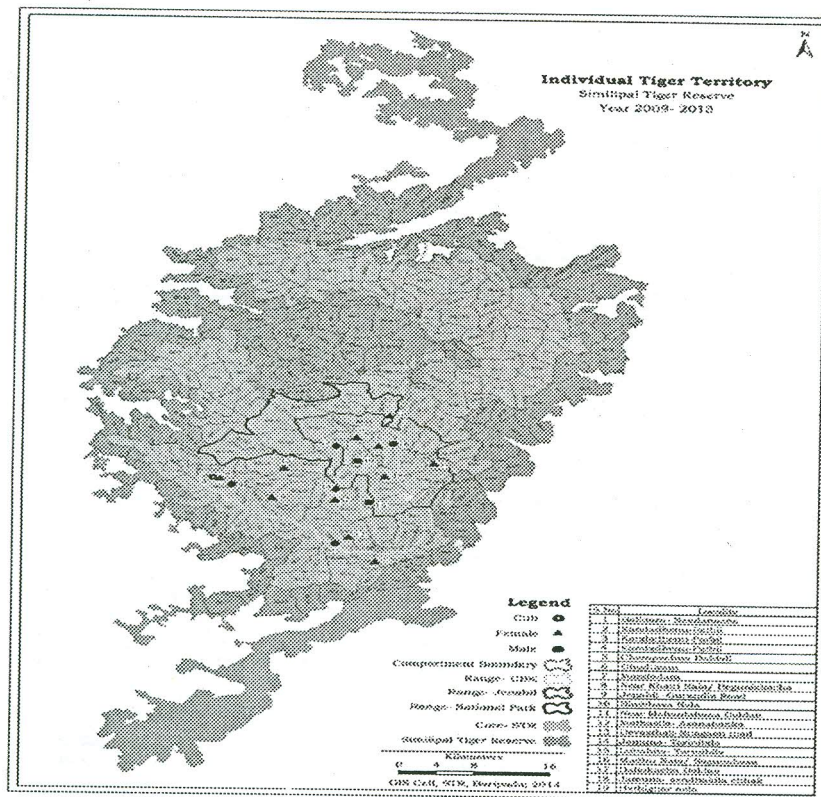


Fig.5: Individual tiger territory based on their pugmarks analysis in Simlipal Tiger Reserve.

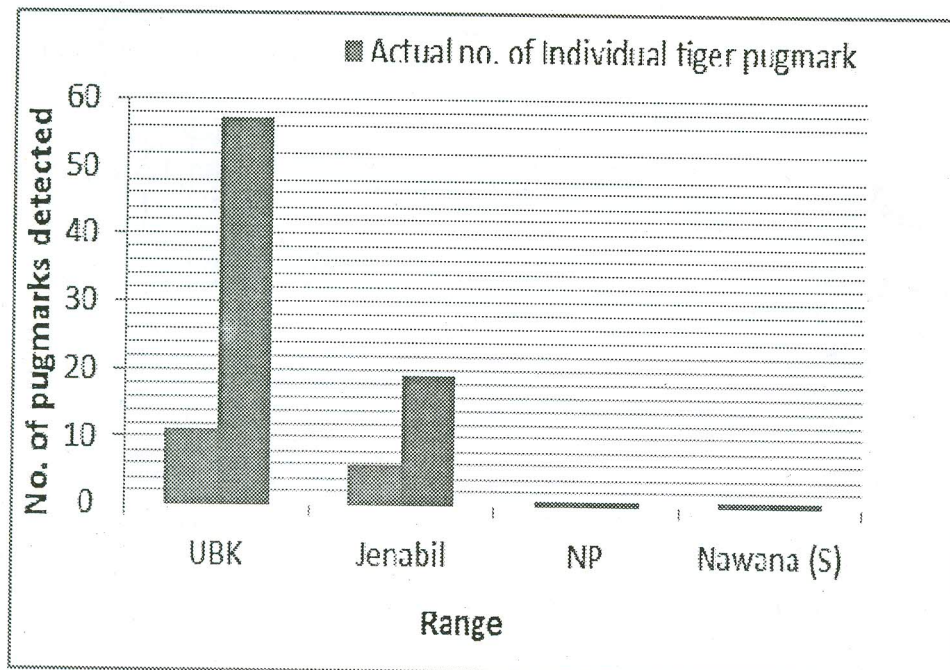


Fig.6 : Range wise detection of pugmarks at different locations in between 2009 and 2013.

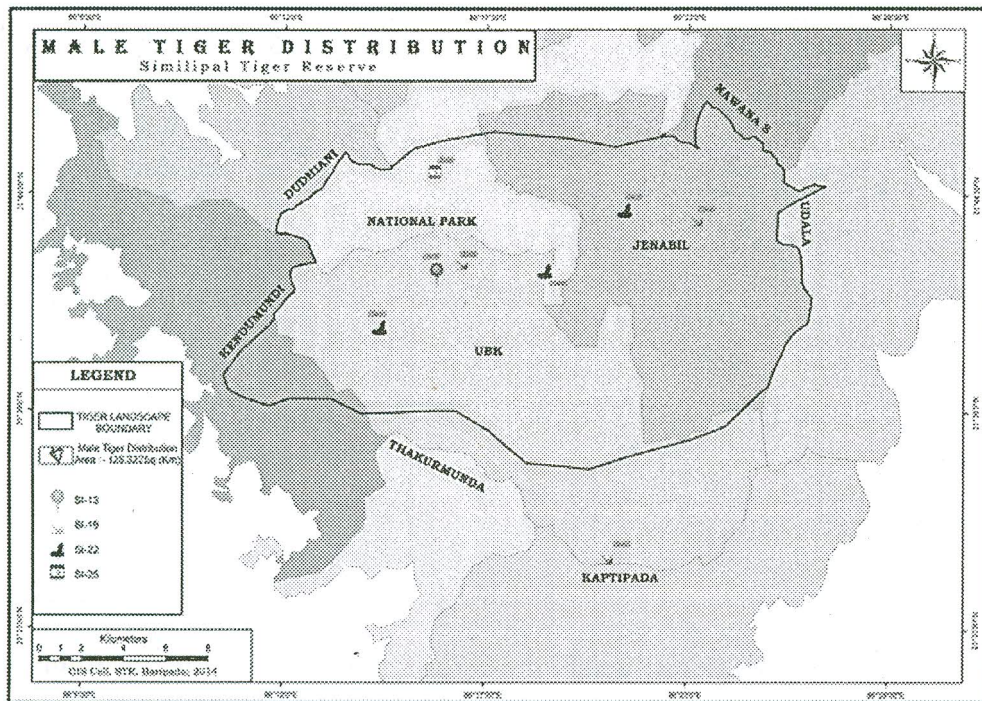


Fig.7: Distribution of individual male tigers in STR, 2014.

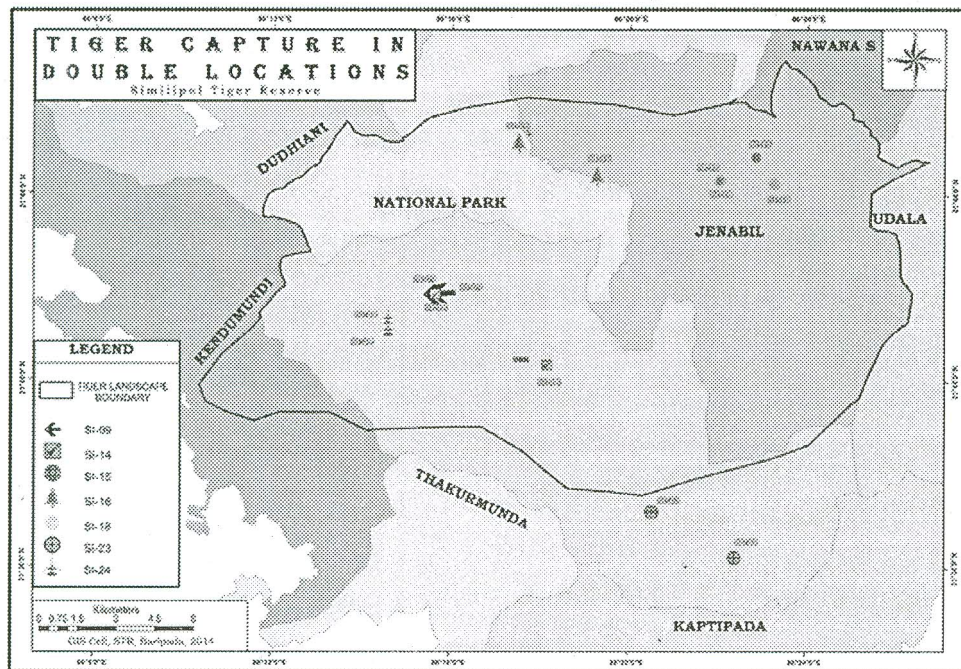


Fig.8: Individual tigers captured in double camera trapping locations site.

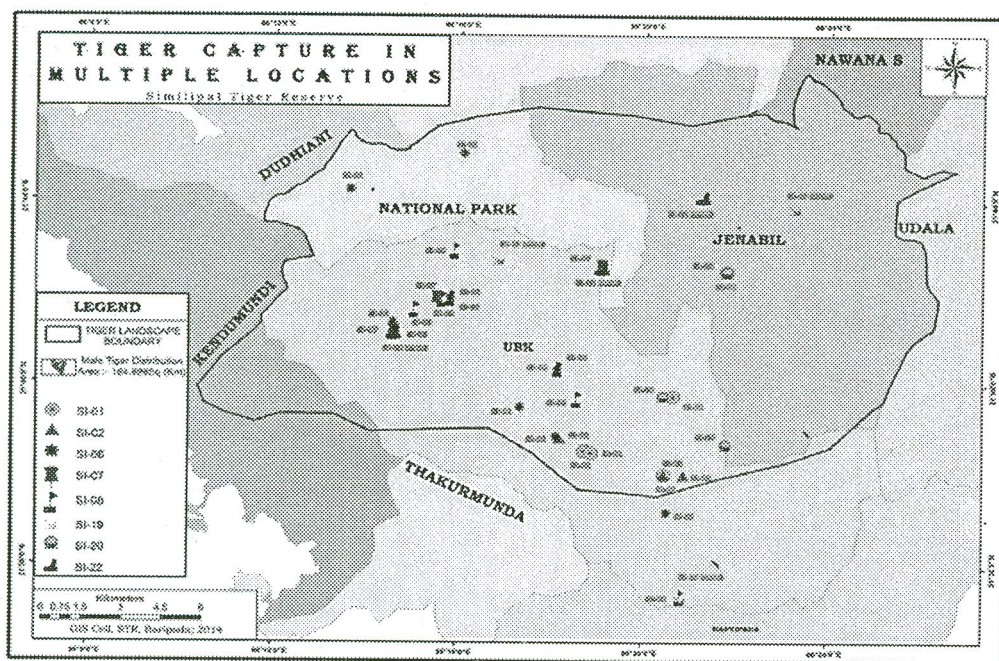


Fig.9: Individual tigers captured in multiple cameras trapping locations site.

Table 1: Prey densities in Similipal Tiger Reserve, during 2013 (Post monsoon).

Post Monsoon.

Prey	Density \pm SE (2013)
Barking deer	8.2 \pm 0.8
Chital	*
Sambar	5.9 \pm 0.8
Mouse deer	*
Wild pig	6.5 \pm 1.5
Rhesus Macaque	*
Common Langur	8.6 \pm 1.1
Pea fowl	*
Jungle fowl	*
Giant squirrel	9.1 \pm 1.4
Bison	*
Hare	*
Overall Prey	28.9 \pm 1.9

D = Individual Density, SE = Standard Error, * = Concerned species data not sufficient

**Table.2: Prey densities in Similipal Tiger Reserve, during 2014 (Pre monsoon).
Pre Monsoon.**

Prey	Density \pm SE (2014)
Barking deer	10.5 \pm 1.1
Chital	5.3 \pm 1
Sambar	12.1 \pm 1.8
Mouse deer	*
Wild pig	17.3 \pm 6.3
Rhesus Macaque	*
Common Langur	34.8 \pm 4.2
Pea fowl	5.8 \pm 1.3
Jungle fowl	*
Giant squirrel	*
Bison	*
Hare	5.4 \pm 1.3
Overall Prey	33.6 \pm 2.2

D = Individual Density, SE = Standard Error, * = Concerned species data not sufficient

**Table.3: Available prey densities D \pm SE (km²) in buffer area of
Similipal Tiger Reserve, 2013-14.**

Division	Post monsoon (2013)	Pre monsoon (2014)
Karanja	21 \pm 4.9	16.1 \pm 1.8
Rairangpur	17 \pm 3.6	13 \pm 2.3
Baripada	14.9 \pm 1.9	10.6 \pm 1.2

14.7 All India Tiger Estimation Training Program.

- Regional Workshop on All India Tiger Estimation 2013-14 (Country level assessment of Status of Tiger, Co-predators and Prey in India) was held in Kanha Tiger Reserve from 11th to 13th September, 2013. Field Director, Similipal TR, Deputy Director, STR, DFO Baripada, Three Range Officers and Field biologist of STR attended the said workshop at Kanha.
- State level Training Program on All India Tiger Estimation was organized by STR in Chandaka Wildlife Division at Godibari on 9th November 2013. Sri B. R. Dash, Deputy Director, STR and Sri Satyaranjan Behera, Field Biologist were the Resource Persons for the training programme.

15. FORENSIC LABORATORY ACHIEVEMENTS.

- Since January 2013, first time forensic lab established at STR headquarters, eight permanent mounting slides were prepared so far from the hairs obtained from seized animals and signature prepared for the animals of STR.
- Sophisticated lab instrument like Spectroquant Pharo 300 (Spectrophotometer), Multiline 3420G, Microscope Olympus CX-31, Microphotographic Attachment Lens type view Digital Camera, Universal Hot air Oven, Deep freezer RQF 425 inter volume 450 have been procured and all installed in forensic lab at STR.
- One leopard skin were detected and seized on 05.04.2014 in Sirisa village of Mayurbhanj district by staff of Pithabata WL Division. To ascertain the originality of the skin it was sent to newly established STR forensic lab. Forensic test (hair sample) was conducted in the forensic lab. The medullary and cortex part of the hair sample were compared with the reference from WCCB manual as well as signature available from old leopard skins. Finally, it was confirmed to be a leopard skin and forensic test certificate was issued in OR case No-03P of 2014-15.

16. GIS LABORATORY ACHIEVEMENTS.

- Geographical Information System (GIS) lab of STR has also been modernized and functioned with sophisticated advanced software. The instruments like Plotter (HP Design jet T520), Work station (HP Monitor Pavilion 27xi), HP core i5 CPU, APC Smart UPS and Arc GIS Software version 10.1 has been procured and installed successfully.
- The satellite imagery of tiger reserve boundary, sanctuary boundary, division, range and section level boundary, compartment boundary of wildlife sanctuary and forest land use and land use pattern map of STR in the year 2004 and 2012 were procured from NRSA (National Remote Sensing Agency, Hyderabad) through ORSAC (Odisha Space Applications Centre). Different GIS level comparison and digital maps preparation for STR have been done in the GIS Lab.

17. CHECKLIST OF BIRDS IN SIMILIPAL.

To date, 361 species of birds have been enlisted in Similipal Biosphere Reserve. Recently the newly published book 'Birds of Similipal Biosphere Reserve' by Dr. Anup K Nayak and Satyesh Naik has photo-documented 260 species of birds covering 64 families in details like identifying features, approximate size, nesting and breeding patterns, food habits and their call.

18. INTER-STATE MIGRATION OF ELEPHANT IN BARIPADA CIRCLE.

Normally in Baripada Division elephants of Jharkhand (Dalma Wildlife sanctuary) use to migrate through the corridor that extends from West Bengal-Deuli-Suliapada. From the year 2010, there is deviation noticed in their normal track, changing their route from Rasgovindpur (Baripada Forest Division)-Nilgiri of Balasore Wildlife Division through Morada-Chitrada (Rasgovindpur Range) to Asanbani-Jugal-Dalki of Betnoti Range. Dalma wildlife sanctuary is at a distance of 10 km south of Jamshedpur in Jharkhand State, having an area of 193 Sqkm. It carries around 158 elephant

population (as per 2007 census), which is beyond the carrying capacity of that sanctuary. Since last four years herd of more than 100 elephants entered to Baripada Division area through Deuli and Rasgovindpur Ranges. They use to stay in Baripada Forest Division for at least 15 days through Deuli-Rasgovindpur-Betnoti ranges raiding standing paddy and other cash crops, damaging houses, injuring human beings during their onward journey to Nilgiri Range of Balasore wildlife Division. Migratory route and forest used by elephant in Baripada division are Phuljhari Forest, Dalki RF, Nadapur Forest, Dalki RF & Asanbani forest. The most vulnerable area in Baripada Division are Sarai under Betnoti Range and Baladia under Rasgovindapur Range. In Nilgiri area of Balasore WL Division elephants usually raid mostly paddy crop fields and cause house damage in search of Paddy, rice and liquor. The Vulnerable villages are Routraipur, Pundal, Kathapal, Patana, Gopalpur, Ayodhya, Hatimunda, Ambajhar and adjoin villages.

During the year 2013-14 in Rairangpur Division elephant depredation occurred for seven times at five different places named Ralibeda, Jhatisiting, Sanhatnabeda, Badampahara, Tendra covering two Range areas Badampahara and Bahalda. Excluding Tendra all other areas comes under Badampahara Range. The larger herd was of 25 member comprising of 6 males and 13 females which appeared twice at Ralibeda (27th Oct) and Sanhatnabeda (22nd Nov) respectively. The smallest herd was of 5 member herd comprising of 3 males and 2 females which appeared at Ralibeda on 11th April., However, highest no. of female elephants were observed at Tendra and Surda area on 23rd August. October and November were the most highlighted months, when elephant depredation occurred for two times where as in the month of April and August depredation by elephant occurred only once.

19. MAN-ELEPHANT INTERFACE IN BARIPADA CIRCLE.

Division	Year	Crop Damage in Acre	House Damage in No	Human Injury	Human Kill	Total Compassionate Amount Paid
Rairangpur	2012-13	26.1	-	-	-	114500
	2013-14	27.54	-	-	-	172350
Balasore	2012-13	570.37	159	-	03	7175260
Baripada	2012-13	250.83	25	-	02	-
Karanjia	2012-13	375.555	84	02	04	358590000

20. INTER-STATE MOVEMENT OF ELEPHANT IN BARIPADA CIRCLE DURING 2013-14.

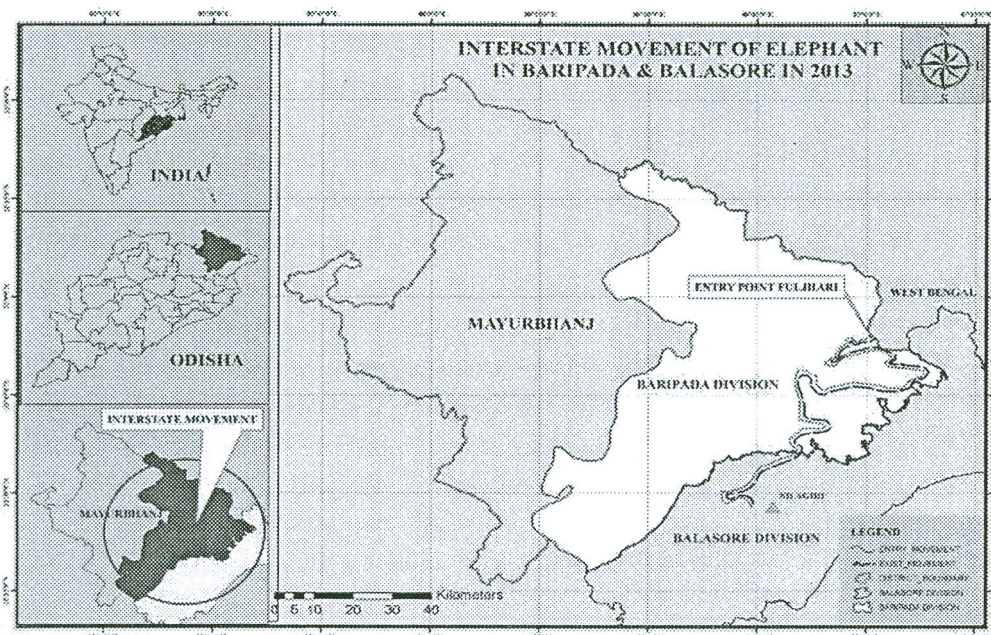
Year	State From Where entered	Entry Point	Herd Composition
2013	West Bengal	Suliapada& Rasgovindapur	115
2014	West Bengal	Rasgovindapur	105

20.1 Herd Composition.

Year	Adult Tusker	Adult Female	Sub-Adult Tusker	Sub-Adult Female	Juvenile	Calf
2012	10	25	20	30	20	10
2013	12	30	10	28	16	09

Detail Information regarding Interstate Movement of elephants in Baripada Division.

Date Of Movement	Place from Where Migrated	Herd Composition
27.10.2013-12.11.2013	Jharkhand & West Bengal	105
January-April, 2014	West Bengal	23
May-2014	Jharkhand & West Bengal	03
June-2014	Jharkhand & West Bengal	07



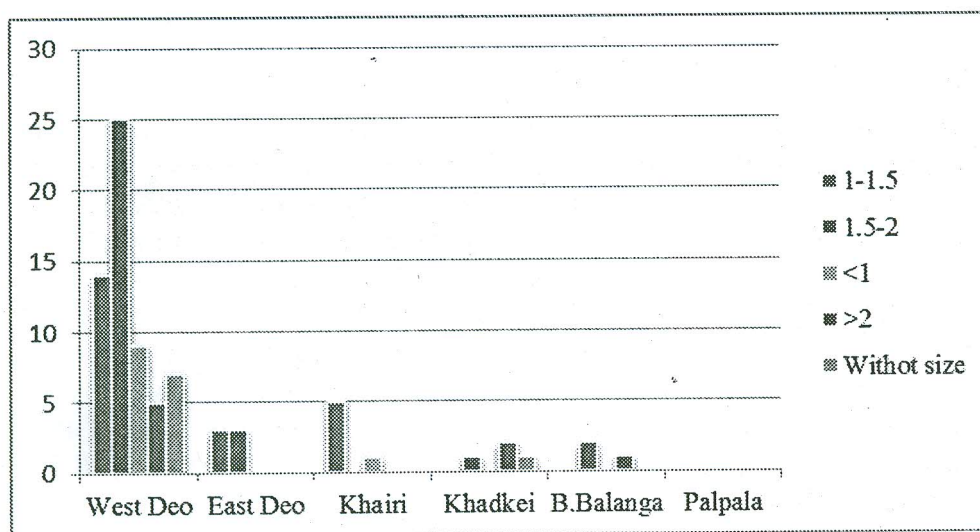
21. CROCODILE CENSUS.

Survey of Muggers in Similipal was conducted on 19/01/2014 & 20/01/2014 to ascertain the status of muggers inside Similipal Tiger Reserve. The direct sighting method was used to count the number of muggers. Different river systems were surveyed and direct sighting as well as indirect evidence such as tunnel, basking place, scute mark on the ground

were collected. The body length was measured by ocular estimation during direct sighting, while the same was also estimated from the tracks of hind paw and the tail marks. The body length is equal to approximately 14xpaw length and approximately 65 times the maximum distance between two lines created because of movement of tail. A total of 79 muggers were found in six different river systems in Similipal. Highest numbers of crocodiles were found in West Deo followed by East deo, Khairi, B. Balanga, Khadkei and Palpala river.

RIVER SYSTEMS	West Deo	East Deo	Khairi	B.Balanga	Khadkei	Palpala	Total
2013	56	08	06	06	04	-	80
2014	60	06	06	03	04	-	79

Population status of Mugger crocodile in different river system.



22. ELEPHANT CENSUS.

The last Elephant census was conducted in (1/6/2012 to 3/6/2012) in core & buffer area of Mayurbhanja Elephant Reserve. Most of the sightings were recorded near water bodies, Foot path, Saltlicks. Only direct sighting was taken into consideration for their counting & age group estimation. In 2012 total 334 elephants were sighted in the core area out of which 132 (39.52) from UBK Range, 62 (18.56%) from Chahala Range, 52 (15.56%) from Jenabil Range, 50 (14.97%) from Pithabata Range, 18 (5.38%) from National Park Range, 14 (4.19%) from Nawana North Range and 6 (1.79%) from Nawana South Range were sighted. In 2012 the adult cow population is high (46.4%), followed by calf (15.86%), sub adult cow (7.48%), Juvenile (11%), sub adult bull (7.48%), adult bull (4.49%).

Population Structure of elephants in Similipal Tiger Reserve (Core) during 2012

Name of the Range	Adult Bulls	Adult Cows	Sub-Adult Bulls	Sub-Adult cows	Adult/Sub-adult unknown	Juvenile	Calf	Total
UBK	07	55	10	26	00	11	23	132
Jenabil	03	25	04	06	00	05	09	52
Nawana(N)	00	08	00	01	00	01	04	14
Chahala	04	26	04	10	00	10	08	62
Nawana(s)	00	02	00	02	00	02	00	06
National Park	00	09	03	03	00	03	00	18
Pithabata	01	30	04	01	00	05	09	50
Total	15	155	25	49	00	37	53	334

23. MID-WINTER WATERFOWL CENSUS.

Mid-Winter waterfowl census was conducted in Mayurbhanj District on 5th and 6th January 2014 covering 28 wetlands in Baripada, Karanjia and Rairangpur Division. A training program was organized at the office of the Field Director, Baripada headed by the Regional CCF on dated 4th Jan in which the forest Officials, Wildlife researchers participated. Bird identification features and census techniques were discussed. After the training 7 groups were formed each headed by 1 bird expert. A total 4108 number of individuals of 40 species of birds including 5 additional species were reported from the census areas. Out of the total, 11 species were winter visitors of the area. Out of the 28 wetlands Nesa was found to be the most diversified (21 species) water bird followed by Badjor (20 species) and Suleipat (18 species) respectively. Among all Lesser whistling was the most abundant followed by Fulvous whistling Duck, Red Crested Pochard, Tufted Duck, Gadwall, Great Crested Grebe, Common Teal and Ferruginous duck.

24. DEATH OF ELEPHANT DURING 2013-14.

Name of the Division	Date of Detection	Place of Detection Compt No/Range	Sex	Age	Nature of Mortality
Rairangpur	30.10.2013	Manbir RF, Pillar no-34.	Male	15	Poaching
Baripada	-	-	-	-	-
Karanjia	02.07.2013	In side Satkosia Range Compt No-05	Female	Juvenile	Predated
	18.11.2014	Inside Badapaliposi Compt No TL-06	Female	60	Due to old age
	05.05.2014	Compt No -WD 17 of Similipal	Female	5	Toxemia resulting from peritonitis.

STR	13.10.2013	KH-25,Jenabil	Female	2.5	Natural
	14.01.2014	KH-26,Sanchaturi	Male, Juvenile	5	Natural
	25.03.2014	Near Khainchia Nala Compt no WD-26	Male	35	Due to Peritonitis
	05.04.2014	Ambaghati compt SL 6(p)	Female	60	Due to senility

25. MAN-ELEPHANT INTERFACE DURING 2013-14.

Name of the division	Human killed by elephant	Human injured by elephant	House damaged by elephant	Crop Damaged by Elephant	Death of Elephant	Compassionate amount paid in Rs
Rairangpur	03	00	-	117.64Ac	01	1099100
Karanjia	01	01	113	98.315	03	1702040
Baripada	01	01	20	283.53	01	3156020

26. CAPACITY BUILDING.

Date	Place	Topic	Participants
21.09.2013	Nuagaon	Hands on training on camera trap	Field staff of National Park, Jenabil & UBK Range
29.09.2013 to 30.09.2013	Baripada	Wildlife crime, Intelligence, Investigation in collaboration with Wildlife Crime Control Bureau, MoEF,GoI	Officers and field staff of Forest, Police, Railway, CRPF & OSAP
08.10.2013	Sarat	Tiger Monitoring in corridor area	Frontline staff of Baripada & Balasore WL Division
10.10.2013	Satkosia	Tiger Monitoring in corridor area	Frontline staff of Karanjia & Keonjhar WL Division
19.10.2013	Karanjia	Tiger monitoring	Frontline staff of karanjia Division
20.10.2013	Bisoi	Tiger Monitoring	Staff of Bisoi, Manada & Bangriposi Range
23.10.2013	Udala	Tiger Monitoring	Staff of Udala & Kaptipada Range
25.10.2013	Manchabandha	Tiger Monitoring	Staff of Pithabata & Dukura Range
29.10.2013	Upper Barakamuda	Tiger Monitoring	Staff of UBK, & National Park Range
30.10.2013	Dhudurchampa	Tiger Monitoring	Staff of Nawana (S) & Jenabil Range
31.10.2013	Nawana	Tiger Monitoring	Staff of Nawana (N) & Chahala Range
04.01.2014	Baripada	Water fowl census	Frontline staff, Researchers

22.01.2014 to 23.01.2014	Baripada	Wildlife Crime, Law, Forensics etc in collaboration with TRAFFIC India	DFOs, ACFs, Range Officers & Foresters of Baripada Circle
25.02.2014	Karanjia	All India Tiger Estimation	Frontline staff of Karanjia Division
26.02.2014	Rairangpur	All India Tiger Estimation	Frontline staff of Rairangpur Division
01.03.2014	Pithabata	All India Tiger Estimation	Staff of Pithabata WL Range
04.03.2014	Manchabandha	All India Tiger Estimation	Frontline staff of Baripada Division
26.05.2014 to 07.06.2014	Baripada	Special Police Training by OSAP, 5 th Battalion	Special Tiger Protection Force of Similipal Tiger Reserve

27. OUTSIDE STATE TRAINING.

Date	Place	Topic	Participants
11.09.2013 to 13.09.2013	Kanha Tiger Reserve, MP	Regional Workshop on All India Tiger Estimation- 2014	Field Director, STR Deputy Director, STR DFO, Baripada Division Range Officers, Pithabata WL, Dukura & UBK Range Field Biologist, STR
03.02.2014 to 07.02.2014	Agartala, Tripura	Forest Tribal Interface	Field Director, STR & RCCF, Baripada
26.06.2014 to 27.06.2014	Bangalore	Contribution of Forest Plantations in Livelihood Support and Industrial Production	Field Director, STR & RCCF, Baripada

28. EXPOSURE VISITS.

Date	Place of visit	Participants
25.09.2013 to 26.09.2013	Kanha Tiger Reserve, MP	Range Officer, Manada 4 Foresters & 4 Forest Guards of STR
22.02.2014 to 24.02.2014	Animal Rescue Centre, Khyerbari, Jaldapara WL Sanctuary, West Bengal	Deputy Director, STR 3 Foresters of STR
28.02.2014 to 03.03.2014	Animal Rescue Center, Sasan Gir, Gir National Park, Gujrat	Field Director, STR & RCCF, Baripada ACF i/c National Park Range Range Officer, UBK Range

29. PHAILIN DISASTER.

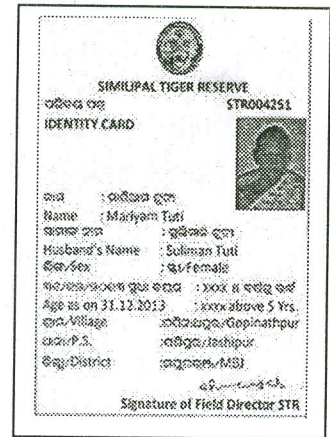
Due to severe cyclonic storm "Phailin" in October, 2013 road network over 126 km and 64 nos of wooden bridges were damaged resulting in disruption of entire road communication in side the reserve. More than 1000 nos of trees were uprooted by which forest roads were blocked at many places. Other infrastructure like buildings, VHF sets etc were also damaged. All the damages could be repaired and communication restored to all camps and villages in side the reserve within a record period of one week following day and night efforts of forest staff on a war footing. Similipal could also be opened for visitors almost on time due to timely restoration of communication, which was beyond anybody's imagination.

30. ECO DEVELOPMENT ACTIVITY.

1. 60 number of local and unemployed youths & 15 women from 3 SHGs have been trained and associated with ecotourism activities in the protected area as eco-guides and providing catering & hospitality services to tourists.
2. The indigenous traditional knowledge on making different handicrafts by the local tribes has been encouraged. A platform has been created by establishing a souvenir shop to sell and highlight the products to the tourists near the entry gate. Skill development trainings are being organised in association with State Bamboo Development Agency. Hill broom, bamboo and sabai grass plantations have been raised to provide raw materials to the artisans.
3. About 200 hectare rubber plantation have been raised on the barren land of the beneficiaries. Apart from this, cash crops like turmeric, hill broom, ginger and arrowroot etc have been raised by the villagers. Apart from economic gain; the villagers have been diverted from tree felling and poaching activities & engaged in agriculture.
4. Health service is improved with three numbers of mobile health units operating inside Similipal villages in three Gram Panchayats.
5. 60 solar street lights have been provided for the villages.
6. Pending issues of the sanctuary villagers at different govt offices such as old age pensions, job cards. Medical issues etc are being sorted out by involving Honorary Wildlife Wardens and Local NGOs.
7. Health camps and veterinary camps are organized regularly in coordination with health department and animal husbandry department.
8. A programme for empowerment of rural youth called "Youth For Environment Initiative" is going on in the buffer area villages with support from District Administration.
9. Handholding support for enhancement of livelihood option is being provided by engaging one reputed NGO to the families relocated from Core area of the tiger reserve and resettled at Asankudar village under Thakurmunda Tahasil.

31. IDENTITY CARDS FOR SIMILIPAL VILLAGERS.

The process of issuing identity cards to the bonafide residents of villages in side Similipal Sanctuary have started. The NGO "Sangram" has been involved in the process with cooperation of District Administration, PRI Members. The distribution of identity cards in 11 villages covering one GP (Astakuanr) have been completed in 1st phase. The preparation of cards for other villages is going on. Identity cards are being issued to all the legitimate villagers with more than 5 years age. The identity card will help the bonafide villagers in hassle free movement to and from outside villages and towns where they have to go for their weekly markets, medical and other works. It will also help in identifying the villagers and preventing intrusion of outside people into the sanctuary.



32. INVOLVEMENT OF NON-GOVERNMENT ORGANIZATIONS.

32.1 Sangram.

The organization is associated with STR for detection of offence, intelligence collection, activation of EDCs and VSSs and capacity building of frontline staff. The organization has also been involved in socio-economic survey and preparation of identity cards for sanctuary villagers.

32.2 Indian Grameen Services.

The organization is associated with capacity building of EDC members of Jamuani and involving them in eco-tourism activities. The organization is also providing handholding support to the villagers of Asankudar resettlement colony relocated from core area of Similipal Tiger Reserve.

32.3 Wildlife Trust of India.

The organization in association with Sri Satyanarayan Das, Honorary Wildlife Warden have conducted awareness programmes and health camps in fringe villages of Similipal under Karanjia Division. A Mobile Veterinary Service (MVS) Unit for rescue and rehabilitation of wild animals in Similipal landscape have been started this year in collaboration with this organization.

32.4 Wild Odisha.

Participated in sign survey under Tiger Monitoring in Kaptipada/ Udala Range area. The organization also was associated in a number of awareness programme in villages under Thakurmunda Range area.

32.5 Gram Vikas.

The organization is associated in a programme for empowerment of rural youth called "Youth For Environment Initiative" in the buffer area villages of Similipal.

32.6 TRAFFIC India.

Organised a workshop for forest officers of Baripada Circle on Strengthening of Wildlife Enforcement and Conservation in India.

32.7 People For Animal.

Organised cattle immunization and animal health camps in buffer villages with support from STR Management.

33. RESEARCH ACTIVITIES.

33.1 Research works undertaken during 2013-14.

Sl. N	Activity	Year	Conducted by
1	Status and species composition of Meadows in Similipal Tiger Reserve	2013-14	Field Director, Similipal Tiger Reserve.
2	Status and extent of Human- Sloth Bear Conflict in and around Similipal Sanctuary-	2013-14	Field Director, Similipal Tiger Reserve.
3	Monitoring of river system, meadows and saltlicks of Similipal Tiger Reserve a remote sensing and GIS approach	2013-14	North Odisha University, Baripada
4	Survey on roosting sites of Bats in and around Similipal Biosphere Reserve	2013-14	Field Director, Similipal Tiger Reserve.
5	Reintroduction of orchid <i>Dendrobium regium</i> and conservation of Rare, Endangered and Threatened species in Similipal Tiger Reserve	2013-14	Field Director, Similipal Tiger Reserve.
6	Propagation of rare orchid <i>Tainia hookeriana</i> through manual pollination	2013-14	Field Director, Similipal Tiger Reserve.

33.2 Research Publications.

S.No	Topic	Journals /Publishers	Authors
1	Effect of harvesting pressure on plant diversity and vegetation structure of Sal forests of Similipal Tiger Reserve, Odisha	Tropical Ecology 54(1): 97-107, 2013 ISSN 0564-3295 © International Society for Tropical Ecology www.tropecol.com	SASMITA SAHOO & PRIYA DAVIDAR
2	Species Diversity and Habitat Characteristics of Freshwater Fishes in the Similipal Biosphere Reserve, Odisha with Some New Records	Biological Forum – An International Journal 5(2): 64-70(2013)	B.K. Baliarsingh, Laishram Kosygin, S.K. Swain and A.K. Nayak
3	Analysis of Temporal and Spatial Changes in the Vegetation Density of Similipal Biosphere Reserve in Odisha (India) Using Multitemporal Satellite Imagery	Hindawi Publishing Corporation International Journal of Ecology Volume 2013, Article ID 368419, 6 pages http://dx.doi.org/10.1155/2013/368419	Anima Biswal, A. Jeyaram, SumitMukherjee, and Umesh Kumar

4	A preliminary study on bryodiversity of Similipal Biosphere Reserve (Odisha), India	ARCHIVE FOR BRYOLOGY 157 (2013)	Afroz Alam, Kambaska Kumar Behera, Sharad Vats and Mudassar Iqbal
5	Ecological significance of core, buffer and transition boundaries in biosphere reserve: A remote sensing study in Similipal, Odisha, India	Computational Ecology and Software, 2013, 3(4): 126-137	Anima Biswal, A Jeyaram, Sumit Mukherjee, Umesh Kumar
6	Genetic resources of wild tuberous food plants traditionally used in Similipal Biosphere Reserve, Odisha, India	Genet Resour Crop Evol DOI 10.1007/s10722-013-9971-6 Springer Science + Business Media Dordrecht 2013	R. C. Misra • H. K. Sahoo D. R. Pani D. C. Bhandari
7	Local knowledge suggests significant wildlife decline and forest loss in insurgent affected Similipal Tiger Reserve, India	Mongabay.com Open Access Journal - Tropical Conservation Science Vol.6 (2):230-240, 2013	Sasmita Sahoo, Jean-Philippe Puyravaud ¹ and Priya Davidar
8	Generation of Digital database using ArcGIS software for preparation of Wildlife Management plan of Similpal Biosphere Reserve, Odisha	14thEsri India User Conference 2013	D.K.Rout, Ch Sobhabati Devi, and A.K.Mohapatra
9	Human-elephant Conflict: Case study from Balasore & Rairangpur Division of Mayurbhnaja elephant reserve, Odisha.	Int.Res.Jou.Environment sci, Vol2 (4). 2013	S. R. Mishra, A. K. Nayak and D. Nandi
10	Population status of mugger crocodile (<i>Crocodylus palustris</i>) in similipalTigerReserve, Odisha, India	Int Res jou Environment sci.Vol2 (5). 2013	S. R. Mishra, A. K. Nayak and D. Nandi
11	Current status of Asiatic elephant (<i>Elephas maximus</i>) in Rairangpur division, Odisha, India	NOU journal.Vol-2, N0-1. 2013	S. R. Mishra, A. K. Nayak, H. K. Sahu and D. Nandi
12	Human-Elephant Conflict: Case Study from karanjia & suggested measure for mitigation	Daya publication. New Delhi. 2013	S. R. Mishra and A. K. Nayak,
13	<i>Orthosiphon aristatus</i> (Lamiaceae): A new record for the flora of Odisha, India	Plant Search Research 35 (1&2) : 72-73. 2013	A.K. Nayk, B. R. Dash, T. Kar, K. K. Mandal
14	Studies on lac insect (<i>Kerria lacca</i>) for <i>Orthosiphon aristatus</i> conservation of biodiversity in Similipal Biosphere Reserve, Odisha, India	JEZS 2014; 2 (1): 1-5 © 2014 JEZS	J. Mohanta, D. G. Dey, N. Mohanty

33.3 Publication of book titled “Birds of Similipal Biosphere Reserve” authored by Dr. Anup Kumar Nayak & Sri Satyesh Naik.

The avifauna of Similipal Biosphere Reserve have been documented for the first time in a book form published by Similipal Tiger Reserve, which can be a handy field guide for the users.

33.4 Studies on grass.

Extensive floristic survey were undertaken in the meadows of Similipal Tiger Reserve during the year. As a result 52 number of grass species have been documented from different meadows of Similipal Tiger Reserve.

33.5 Propagation of endemic orchid.

For the first time in Similipal, hand pollination of rare and endemic orchid *Tainia hookeriana* was successfully carried out in Jenabil Range.

33.6 Conservation of rare and endemic orchids.

An important step was taken to conserve the rare and endemic orchid *Dendrobium regium* was reintroduced through vegetative propagation in Chahala and Upper Barakamuda Range. The endemic orchid *Eria meghasaniensis* and *Tainia hookeriana* were also reintroduced in Upper Barakamuda Range through vegetative propagation.

33.7 Floristic survey.

During botanical exploration in Similipal, three rare plants were recorded which are new distributional record for geographical boundary of Odisha. *There are Orthosiphon aristatus, Sloanea sterculiacea and Duchesnea indica.*

33.8 Study on bats.

During the year a study was carried out to know the diversity of bat fauna in Similipal Tiger Reserve and its adjoining areas. As a result, 12 species were recorded from Similipal landscape including two new records for the State, i.e, Lesser short-nosed fruit bat *Cynopterus brachyotis* (Pteropodidae) and White bellied tube-nosed bat *Murina huttoni* (Vespertilionidae).

33.9 Study on human-sloth bear conflict.

A study was conducted to know the extent and magnitude of the human – sloth bear conflicts and conflict behavioral aspect of sloth bears in and around Similipal. It was found that considerable number of such conflicts occurring in Gurguria and Satkosia Ranges of Karanjia Division. Based on the study, some mitigation measures have been proposed and conservation recommendations have been made.

34 OBITUARY.

- ♣ Sri Dillip Kumar Jena, Range Officer, Udala Range expired on 13.12.2013 due to cardiac arrest.
- ♣ Sri Ananda Jena, Forester of Karanjia Division expired on 04.12.2013.
- ♣ Sri C. S. Mohanta, Forester, Karanjia Division expired on 09.12.2013.
- ♣ Sri Rusia Dehuri, working on Temporary Status working in UBK Range of STR expired on 04.10.2013 due to cardiac arrest.
- ♣ Sri Rama Chandra Murmu, working as Protection Assistant in Nawana (N) Range of STR expired on 23.06.2013 due to malaria.
- ♣ Sri Rengo Mohanta, working on Temporary Status in Pithabata WL Range of STR expired on 24.06.2014 due to fever.

The Annual Report has been prepared with inputs from Sri Bikash Ranjan Dash, Deputy Director, Similipal Tiger Reserve. Sri Rabinarayan Mohanty, Dy. R.O., STR, Sri Budheswar Naik, Dy. R.O., STR, Sri Lalatendu Senapati, Fr. STR, Sri Sandeep Ranjan Mishra, Research Fellow, STR, Miss Truptirekha Kar, Research Fellow, STR, Sri Satyaranjan Behera, Field Biologist, STR, Sri Dharanidhara Mohakud, Guide, STR and others.

Dear Sir,

Greeting from Dev Tour & Travel, Baripada!!!

It is a great matter of fortune and honor for us to have an officer like you for our Similipal Tiger Reserve. After the devastating Phailin, the damage done to the roads and infrastructure inside and nearby Similipal affected our business severely too. I am a small entrepreneur with a small travel agency "Dev Tour & Travel". A major share of our business depends upon Eco-Tourism at Similipal. This year due to the devastation caused by Phailin our business backbone was broken. We were in shock and were much worried about survival.

But under your dynamic leadership, the task of reinstating the infrastructure, roads and bridges inside Similipal went very smoothly. We all are still amazed to see such a speedy recovery from the damage. All I can say is that you proved all of us wrong as by ensuring the fastest recovery of the infrastructure and roads in record time.

We are very glad for your effective and dynamic leadership. As long as you are there to look after our Similipal, we will feel safe and secure about our Bread & Butter.

Once again thanking you so much!!!

Wishing you a very Happy New Year!!!

With best compliments from

Devprasanna Kar,
Dev Tour & Travel, Baripada,
Mayurbhanj, Odisha
+91-97761-92962, 97761-92963

Appreciation letter from Dev Tour and Travel.



FD,STR receiving RBS earth heroes award 2013 at New Delhi



SBR Local committee meeting at Baripada on 19.06.2014



Workshop on strengthening of law enforcement on 22nd & 23rd January, 2014.



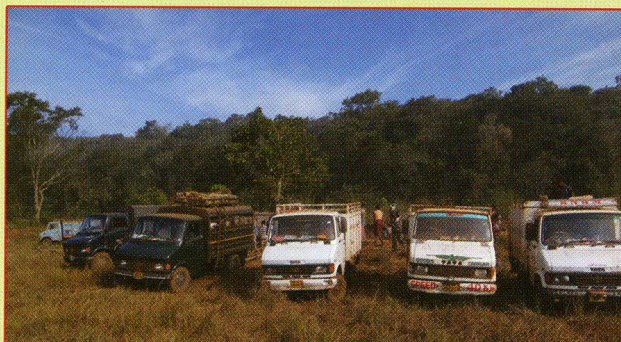
Workshop on crime investigation on 29th & 30th Sept,2013



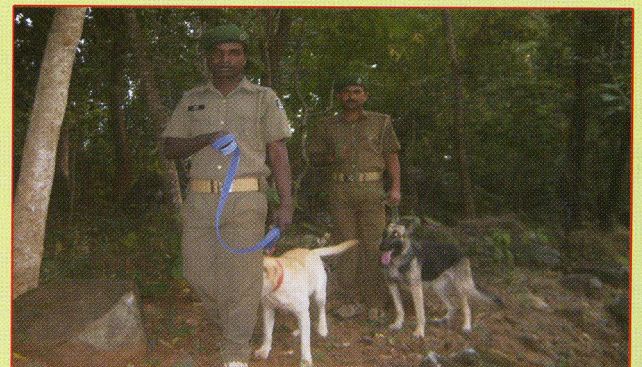
Legal work shop at Manchabandha on 01.12.2013



Co-ordination meeting with Railway Department on 22.7.2013



Relocation of settlement from UBK



STR Dog Squad





ORCHID – *Dendrobium regium*

Field Director, Similipal Tiger Reserve cum Regional Chief Conservator of Forests, Baripada
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