

**REPORT ON MONITORING &
FUTURE MANAGEMENT PROSPECT OF
Tumsar Sub-Division**



Tumsar Sub-Division of Bhandara Division (M.S.)-

This report is produced to put forward the findings of the entire monitoring program of our NGOs named **“SAVE ECOSYSTEM AND TIGER” (SEAT) & S.E.W.A. Organization** conducted in Tumsar sub-division with the help of the **Forest Department**. The forest cover of the north of Bhandara district has been inevitably crucial in terms of the potential wildlife it sustains and also as the corridor used for the movement of animals. In the past, the presence of tigers has been reported in the area as transient or resident but the scarcity of some authentic study or monitoring data led us to focus on this. Our group has been monitoring various forest areas in Bhandara and Gondia districts with the forest department through several ways including camera traps, transect lines, pugmark analysis, scat analysis with regular patrolling in terms of any illicit activities.

Tumsar sub-division is a part of Bhandara forest division. The forest of Tumsar sub-division is a typical dry deciduous forest which constitutes four ranges viz. 1) Nakadongri, 2) Tumsar 3) Lendezari and 4) Jamb-Kandri. All of these four ranges are well connected with each other.

1) Nakadongri range : The total forest area in different categories is given below :

Forest Type	Area in hectares
R.F.	6349.344
P.F.	2579.293
Jhudpi jungle (forest)	376.790
Total forest area	9305.427

The entire range comprises of four rounds viz., a) Nakadongri, b) Bagheda, c) Chicholi and d) Kawlewada. This each rounds include four beats.

2) **Tumsar range** : The total forest area in different categories is :

Forest Type	Area in hectares
R.F.	6036.610
P.F.	2062.91
Jhudpi jungle (forest)	1264.360
Total forest area	9363.88

The entire range comprises of four rounds viz. a) Tumsar, b) Bapera
c) Hardoli and d) Chicholi.

3) **Lendezari range** : The total forest area in different categories are as follow :

Forest Type	Area in hectares
R.F.	9212.496
P.F.	303.138
Jhudpi jungle (forest)	59.890
Total forest area	9575.528

The entire range comprises of five rounds viz. a) Rondha, b) Lendezari,
c) Chikhali, d) Vitpur and e) Mangarli.

4) **Jamb-Kandri range** : The total forest area in different categories are as follow :

Forest Type	Area in hectares
R.F.	8380.683
P.F.	435.507
Jhudpi jungle (forest)	825.740
Total forest area	9641.930

The entire range comprises of five rounds viz., a) Kandri, b)Hiwra,
c) Mangarli, d) Aandhalgaon and e) Lohara.

In the starting phase, we focused entirely on the Nakadongri & Tumsar range. On first look, the forest area seemed to be flourished with many streams, nallas and water springs with healthy canopy.

When we observed closely, two hill ranges extending quite long in dimensions seemed to be acting as an undisturbed area with a passage for wildlife to move freely. One among the two hill ranges extends from the 'Bawanthadi' river near 'Chandpur' to 'Dawezari' village travelling south-westward to around 20 kilometers. The other hill range extends west-eastward from the village 'Pitesur' to the village 'Dawezari' travelling around 10 kilometers. On examining these hill ranges, we also found some active caves. Also it is to be noted that both of these hill ranges are quietly connected at their tips. We started analyzing the entire area thoroughly in terms of animal trails, water sources, pugmarks/hooves, scats/pellets etc. After identifying the targeted areas, we started installing camera traps provided by the forest department. Once all the camera traps were installed, our team went on monitoring the entire area and collecting the camera trap records daily. Analyzing the camera trap data on daily basis, we have found a positive sign as the sound health of the forest started appearing gradually.

Firstly, the herbivores started reflecting in the camera traps including spotted deer, Sambar deer, langur, Four-horned antelope, Blue bull, Wild boar, Indian Gaur, Sloth bear, hare, peacock etc.



Sambar Deer



Wild boars



Blue Bull



Spotted Deers

Some nocturnal habitats that appeared were Small Indian Civet, Palm Civet, Porcupine, Honey badger (Rattle), Jungle cat.



Porcupine



Honey badger (Rattle)

Gradually, some carnivores entered in the records. Leopard, Indian Dhole, Jackal and Indian Wolf were trapped in the cameras.



Indian Wolf



Leopard

Food seemed to be in plenty for the pray's and the predators. And finally, to add to our jubilation, one of our cameras trapped the **Tiger!**



Male Tiger ('B2')

The first tiger was a **male** found (*referred as 'B2'*) in the Pangdi forest area in Bagheda round of Nakadongri range on 14th of November 2014. We started keeping a track of the cat by collecting scats and pugmarks on the trails. In the meanwhile, our joy knew no bounds as we trapped another tiger in Hardoli round of Tumsar range on 1st of December 2014, a **female** this time (*referred as 'B3'*).



Tigress ('B3')

Our monitoring continued in the entire area which also included interaction with the locals for any news or report of animal movement. There had been some news regarding tiger movement in the Tumsar range even with some direct sighting of the animal.

Our team searched the area and identified few trails which were to be focused for monitoring and we installed camera traps on them. This area too turned up to be healthy in terms of wildlife movement with a sound prey base.

After few days of continuous monitoring in this manner, we were finally able to trap the tiger in a camera on 15th of December 2014 in Chicholi round of Tumsar range. The photographed tiger was a **male** (referred as '**B4**').



Male Tiger ('B4')

Then we matched the received photograph with the one of previous male tiger which was found in Nakadongri range and once again we were elated to know that the tiger is different from the previous male. In all , this monitoring program slowly started turning out to be a great success as not only we had some authentic proof of the presence of the tigers but we can now also identify them distinctively with their stripe patterns.

In the meanwhile, there were also few cattle kill reports in both the ranges. Correspondingly, we went on monitoring this cattle kills with camera traps and we found tiger in them. From these observations, it is evident that there is grazing pressure on the forest land in this area and which needs to be regulated.

The camera traps in forest were left working for many more days with daily inspection and data collection. Few days later, one of our cameras in Pangdi forest area between Bagheda & Lohara round captured a **female** tiger on 5th of January 2015 (*referred as 'B5'*).



Tigress ('B5')

The entire monitoring program was conducted in Nakadongri & Tumsar range started from the month of October. We now have the authentic proof of **four tigers i.e., 2 males & 2 females**, residing in the forest of these two ranges.

While monitoring, we found pugmarks of a **female tiger carrying cubs** near '**Gobarwahi**' forest area between Tumsar and Nakadongri range on 4th of February 2015 but even after tracking her for long we were unable to get photographic records of her.

- **Estimation of number of tigers in Lendezari & Jamb-Kandri range :**

As the monitoring program was performed successfully in the Nakadongri & Tumsar range, our team has started analyzing the Lendezari & Jamb-Kandri ranges to identify forest type, topographic significance, streams, nallas, water sources, animal trails etc. In this first phase of examination, these two ranges appeared to be excellent in health. The reserve forest area is quite large as compared to the other ranges of Tumsar sub-division. Being large in area, the human settlements are less comparatively; thus the lower disturbance for the wildlife.

The signs we encountered in these forest proved the existence of a rich bio-diversity. Also, these two ranges are connected together with almost no fragments. The forest cover including these ranges has better connectivity with the Pench Tiger reserve (Maharashtra as well as Madhya Pradesh).

The reserve forest (R.F.) area of ‘**Lendezari**’ range is 9212.496 hectares and the reserve forest (R.F.) area of ‘**Jamb-Kandri**’ range is 8380.683 hectares. Together, these two ranges comprises of a reserve forest (R.F.) area of 17593.179 hectares which is equivalent to 175.93 Sq. Km.

With the amount of reserve forest area of these two ranges and the superficial observation, we have estimated that more or equal than 6 tigers residing in these ranges.

This brings in a strong need of a scientific study and monitoring of this area to know about the status of wildlife in real and identify the threats.

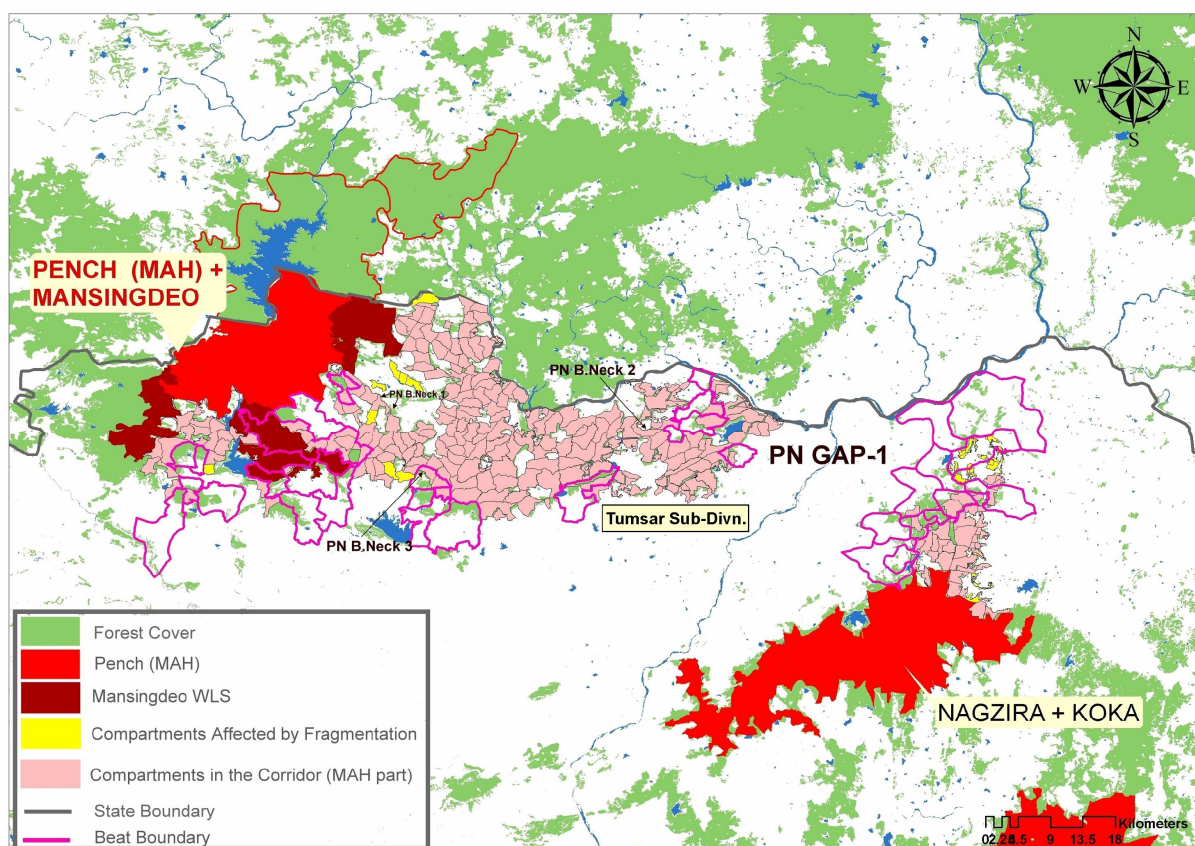
- **Potential of Tumsar sub-division as a wildlife sanctuary :**

The forest of Tumsar sub-division constitutes of four ranges viz. 1) Nakadongri, 2) Tumsar 3) Lendezari and 4) Jamb-Kandri. The total reserve forest area (R.F.) of all the four ranges is 29979.133 hectares i.e. 299.79 sq. km. This entire R.F. is very well supplemented with the P.F. which acquires the area of 5380.848 hectares i.e. 53.8 sq km in total. In addition, the forest has a renowned history of a flourishing wildlife in its every part. The **Bawanthadi Irrigation Project** forms a part of this forest.

The findings of the recent monitoring program in two among the four ranges have revealed the presence of a rich bio-diversity and a healthy prey-predator co-existence. Four tigers have been identified to be resident of these two ranges. Together, all of the four ranges inevitably comprise the potential of a sound wildlife sanctuary. There is a strong need to take this entire sub-division in consideration for monitoring and protecting in terms of several factors including threats and needs.

- **Corridor Connectivity :**

The forest of Tumsar sub-division forms an integral part of one of the biggest corridors of central India for tigers and wildlife to move freely. The Pench Tiger reserve in Maharashtra, forms a very well linked corridor with the forest of Tumsar sub-division from west to east. The other significant corridor merging with the Tumsar sub-division extends from the Pench National park, Madhya Pradesh stretching from the Kohka forest area (M.P.) via Karwahi & Tangla forest area (M.H.) from northwest to southeast. The third corridor merging with the Tumsar sub-division stretches from the north i.e. from ‘Kurai’ via ‘Piparwani’ forest area (M.P.) to ‘**Rajiv Sagar/Bawanthadi Project**’ (M.H.) in its south. This corridor holds a special importance in its own as this portion forms an integral link with the famous ‘Kanha-Pench’, the biggest corridor of central India. The fourth corridor linking the Tumsar sub-division is with the Koka & New Nagzira wildlife sanctuaries from east to west.



Map Developed by W.C.T.

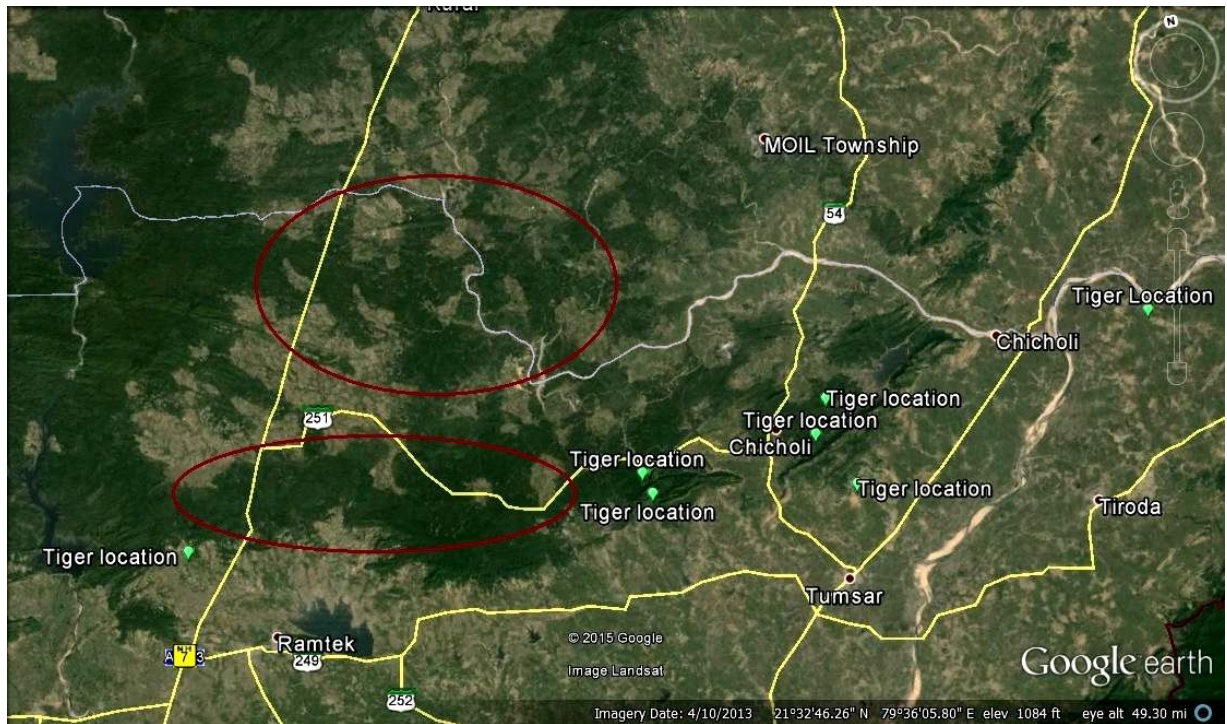
- **Tiger migration (From Pench M.P. to Tumsar sub-division):**

Our team has been monitoring the forest area of Tumsar sub-division from last few years. We have come across with the tiger signs in this area in past but there were no authentic records to analyze the situation. We kept the track of the information we gathered about the movement of tigers in the linkages that connect to the Tumsar sub-division.

Since we monitored this area with camera traps, we were able to gather the proof of their existence and further encouraged to study of their origin. The tigers captured in camera traps being not very old seemed to be the new dispersals. The portion where these tigers were traced came in the corridor that links with the Pench (M.P.). We discussed this matter with **Mr. Vinay Thakre, DCF, Bhandara** and decided to meet the field director of Pench National park **Mr. Alok Kumar, Seoni**. We illustrated the entire situation and our findings to Mr. Alok Kumar and requested to match the photographs we had with the data of tigers in Pench M.P. **The stripe pattern matched with the photographic records of Pench and we assumed was affirmed that all the four tigers (B2, B3, B4, B5) residing in Tumsar sub division are from the Pench National Park (M.P).**

As mentioned about the active corridors, it is more likely assumed that the tigers must have either used the corridor that stretches from the Kohka forest area (M.P.) via Karwahi & Tangla forest area (M.H.) to the forest around Nakadongri range, Tumsar sub-division or from the path that stretches from ‘Kurai’ via ‘Piparwani’ forest area (M.P.) to ‘Rajiv sagar/Bawanthadi project’ (M.H.).

Considering the centre of Pench National park (M.P.) as the origin of the tiger movement, the estimated distance travelled by this tigers on average must be around **50 – 75** kms.



Connectivity & Tiger Location

- **The Menacing National Highway 7 :**

Pench tiger reserve (M.S.), Pench National park (M.P.), Pauni range of Nagpur division (M.S.) and the Kurai range of Seoni division (M.P.) together forms a huge landscape inevitably significant for the tiger conservation including other wildlife in central India. This huge premier forest landscape is bisected by the National Highway- 7 starting from Chourbauli (M.S.) to Suktara-Mohgaon (M.P.) We have identified two major patches on this segment of N.H. 7 in Maharashtra region which are sensitive in respect of animal movement. These two patches are considered to be highly sensitive for wildlife i.e. a) 'Chourbauli to Pauni' running around 3 kms & b) 'Deolapar-Sawraphata to Manegaon phata' running around 4 kms in length. The forest cover that N.H. 7 breaks in M.P. region is the patch between 'Kurai' to 'Suktara-Mohgaon' running around 11 kms in length.



Road Kill

The traffic and intensity of vehicles can be understood on a National Highway. There are numerous cases of road accidents unrecorded in which wildlife pays the price on a daily basis. Deer, Jackal, Sloth Bear, Leopard and even the tigers are on the list which have lost their life in such accidents. In the recent news, the highway is proposed to be a four-lane road. Being a single lane road, the N.H. 7 has proved to be a death call for the wildlife. Given with the significant amount of concern to a tiger need and the world striving with **‘Save the tiger’** badly; does it not rings an alarm to provide a check on the existing problem?

- **Tiger movement on National Highway No. 7 –**

As it is evident that the National Highway 7 divides the major portion of jungle in two parts, which are being highly rich in tiger dominated areas. It can be understood how often it is a need for the tigers to cross the highway. We now have the authentic records of the migration of **five tigers** which evidently crossed the **N.H. 7**.

- a) In **2010**, a young male tiger from the **Nagzira Wildlife Sanctuary (M.S.)** named **'Prince'** has been vanished from the park. It was later found to be in the **Pench National Park (M.S.)** in 2014. No matter which path it has chosen to migrate from one forest area to another, it is a fact that it has crossed the National Highway No. 7 indeed.
- b) As the camera trap monitoring was exercised in the Tumsar sub-division by our team from the October 2014, the findings concluded the presence of four individual tigers in this region. Since all **the four tigers (B2, B3, B4, B5)** were confirmed to be from the **Pench National Park (M.P.)** it is clear that these four tigers have crossed the N.H. 7 to reach the Tumsar sub-division of Bhandara district in Maharashtra.

These are the confirmed records with the camera trap monitoring, it is a fact to be understood that 'n' number of tigers are crossing the deadly National Highway No. 7 on daily basis!

• **Attraction of FDCM on Tumsar sub-division :**

The Forest Development & Corporation of Maharashtra (FDCM) has asked the Bhandara division to handover some forest land for their commercial practices. It is a fact that some practices of FDCM such as Monoculture plantation, 100 % felling of trees which are leading to zero scope for wildlife and its conservation completely. The FDCM is seeking an area of 13671.539 hectares i.e. 136.71 sq. km of forest from the Tumsar sub-division which will be dealt entirely for their commercial practices. This forest area is a premier wildlife habitat with a flourishing bio-diversity as mentioned in this report earlier. The area has a residing population of tigers which draws utmost concern to protect this area from such threats at any cost.

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