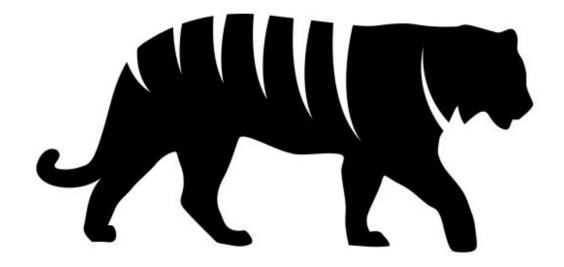
# LONG TERM ACTION PLAN FOR CONSERVATION OF TIGER IN RAJASTHAN



WILDLIFE WING
Rajasthan Forest Department

# Acknowledgement

As the population of tigers is increasing in Rajasthan due to collective and sustained conservation efforts after the launch of Project Tiger, the State Board for Wildlife decided that a long term action plan should be prepared for the coming 30 years. An Expert Committee was constituted accordingly. Based on the deliberations and discussions with the committee members, a draft report has been prepared. The contribution of the Committee members namely Sh. Bharat Singh Kundanpur Hon'ble MLA Sangod Kota, Dr Rajesh Gopal IFS (Retired) & Member State Board for Wildlife, Dr Y V Jhala as Representative of Director, Wildlife Institute of India, Sh Amit Mallick as Representative of Member Secretary, National Tiger Conservation Authority, Sh. Ravi Singh Secretary General WWF India & Member State Board for Wildlife, Sh Simrat Kaur Sandhu Member State Board for Wildlife and Sh Jaisal Singh Member State Board for Wildlife is duly acknowledged. Special thanks are due to WWF India team for their regular interaction and support in drafting this plan.

Several other individuals and organizations have also supported and contributed to the preparation of this report. The report is largely based on GIS analysis and support of Mr. Ashok Jain DCF IT Jaipur and Mr. Ashok Gaur, Senior Developer IT is duly acknowledged, Ms. Maitry Choudhary ACF (Trainee) and Ms. Rekha Verma ACF (Trainee) have majorly contributed to compilation of data, coordination and preparation of this report in the course of their training and deserve special thanks.

The officers and staff working in the Chief Wildlife Warden office have contributed through their collective effort in providing data and compilation of information and their contribution is acknowledged. The contribution of field officers and frontline staff cannot be overlooked as it is because of their efforts that the achievement data is created. It is expected that this long term plan for tiger conservation will contribute significantly to the preservation of these iconic species for generations to come.

The plan has been approved by the Government of Rajasthan vide letter number F. 3(24) Van/2023 dated 06.10.2023. The updated maps including the Protected Areas declared upto October 2023 and the new districts declared in Rajasthan alongwith the letter are attached at the end.

Arindam Tomar
Chief Wildlife Warden &
Convenor, Expert Committee

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#### **ATTACHED:**

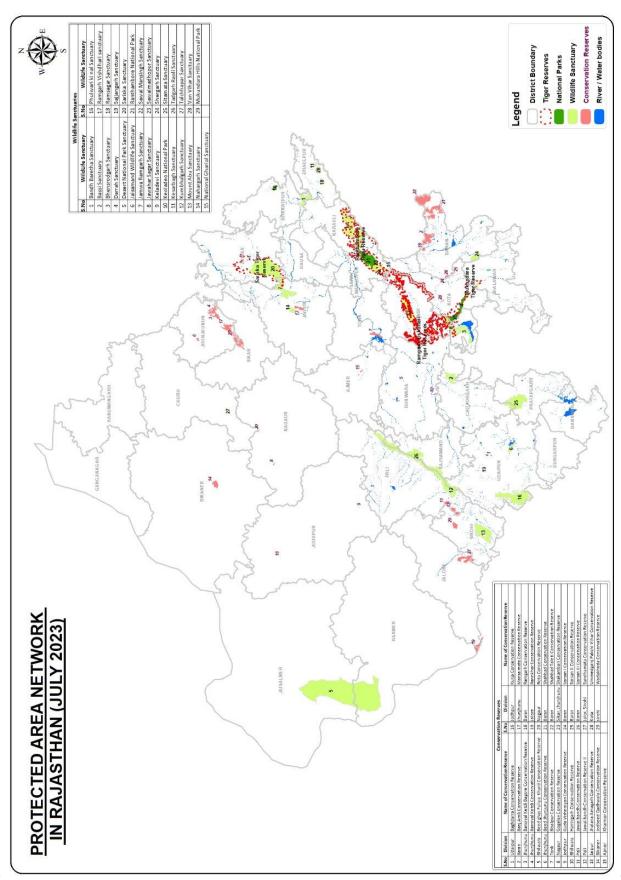
- 1. Rajasthan Government approval letter for Long Term Action Plan for Tiger Conservation in Rajasthan
- 2. Updated Map: Protected Area Network and New Districts constituted upto October 2023
- 3. Updated Map: Long Term Action Plan with Updated PA Network & New Districts

## **CHAPTER 1**

# **INTRODUCTION**

Rajasthan has a rich and varied flora and fauna amidst the harsh climatic condition experienced in the majority of its land area. Along with the rainfall gradient from the west to east, a significant change in forest types can be observed; starting from the dry thorn forest to moist deciduous patches of trees. The great influence of Aravalli mountain range, one of the oldest mountain ranges of the world (the name came from its geological standpoint – *Ara* Vertical, *Valli* Mountain), can be observed in terms of floral (e.g., pure patches of *Anogeissus pendula* forests) and faunal diversity. Forest areas of southern and south-central Rajasthan are part of hilly ranges of Aravalli hills, where in the forested area contains hilly forest with the highly undulating areas within the hill range. The south-eastern region of the state is home to the dry deciduous forests, with tropical dry broadleaf forests that include *Tectona*, *Acacia*, and other trees.

Rajasthan Forest Department is playing an important role in protecting the threatened and endangered wildlife by creating inviolate space for wildlife and enriching the quality of habitat through active management. There are 3 National Parks, 26 Sanctuaries and 30 Conservation Reserves located in the State for this purpose. At present, the denser forest areas of the State are mainly located in sanctuaries and national parks, many of whom are under immense biological pressure from the villages situated inside and in the vicinity. These biological pressures reduce the availability of habitat for wildlife and create competition between large carnivores and humans over the use of natural resources. In order to reduce this stress, buffer areas (primarily multiple use area surrounding the core areas) adjoining Protected Areas are planned to be developed so that essential habitat elements like water, habitat and food are available for wildlife.



The historical distribution of tigers in Rajasthan, India, is a subject that has been studied and debated by researchers and conservationists. Rajasthan, a state in northwestern India is known for its arid and semi-arid landscapes. Historically, tigers were found in different parts of Rajasthan, and the region was considered a part of the historical range of the Bengal tiger (*Panthera tigris tigris*). However, due to habitat loss, human-wildlife conflict, and hunting, tiger populations in Rajasthan and other parts of India experienced a significant decline over the centuries. By the mid-20th century, tigers had disappeared from many regions of Rajasthan, except areas such as Sariska and Ranthambore.

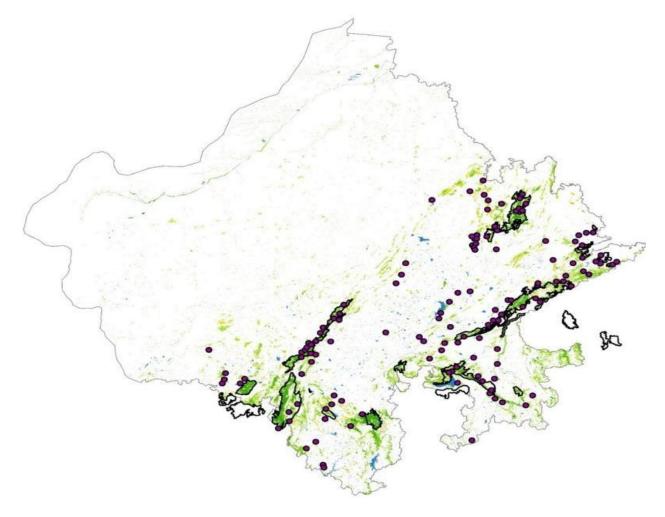


Figure-1: Historical tiger distribution in Rajasthan depicts its presence in the entire Aravalli belt including

its present strongholds (adapted from 'Lost tigers of Rajasthan')

Once, the entire Aravalli belt of Rajasthan was occupied by tigers (Fig.1) as the crucial population of wild tigers living at the westernmost limit of tiger distribution in the world. But due to habitat loss and poaching, the tiger distribution at present is restricted to a few pockets in the eastern part of the state.

In the 21<sup>st</sup> century, conservation efforts have led to the reintroduction of tigers in some parts of Rajasthan. For example, in Sariska Tiger Reserve, tigers were locally extinct, but through a relocation and reintroduction program, tigers were brought back to the reserve. Similarly, Ranthambore has been a successful tiger source from which tigers have migrated far and wide. The reintroduction and protection of tigers in the tiger reserves have shown positive results, with the tiger populations in Rajasthan slowly recovering. However, there is still a need for connectivity between different tiger populations in the state and the surrounding regions to ensure gene flow and genetic diversity. Conservation corridors are being proposed and established to connect fragmented tiger habitats and allow for the movement of tigers between different areas. These corridors aim to facilitate the dispersal of tigers and prevent isolation of subpopulations, which can lead to inbreeding and reduced genetic diversity.

Conserving tiger provides an umbrella for conservation of biodiversity in the eastern and southern part of the state. Being an apex predator, tigers are the indicators that a habitat has sufficient resources and ample biodiversity. Tiger bearing Protected Areas and forests harbor sizable populations of major prey species of large carnivores, i.e., chital (*Axis axis*), sambar (*Rusa unicolor*), wild boar (*Sus scrofa*), nilgai (*Boselaphus tragocamelus*), etc. However, the premise that saving tigers ensures conservation of all species found in that ecosystem is increasingly being challenged with

• tigers residing in areas with low preybase as they survive on feral and domestic livestock

• several species hitherto found in tiger habitats in Rajasthan having disappeared, most notably, wild dogs, sloth bears, etc.

## Tiger Reseves in Rajasthan

To conserve a tiger population, the management strategies and policies for that area have to be more robust and focused and accordingly the concept of Tiger Reserves was developed. Currently, Rajasthan has four declared tiger reserves namely Ranthambore Tiger Reserve, Sariska Tiger Reserve, Mukundara Hills Tiger Reserve and Ramgarh Vishdhari Tiger Reserve. Gradually the habitable space for the tigers is being increased with declaration of Tiger Reserves, their expansion and development of corridors. The current status of Tiger Reserves in Rajasthan is as under:

Area in Sq Km

Tiger Reserve	Core Area	Buffer	Total
Sariska	881.11	332.23	1213.34
Ranthambhore	1113.36	293.56	1406.92
Mukundra Hills	417.17	342.82	759.99
Ramgarh Vishdhari	481.91	1019.98	1501.89
Total	2893.55	1988.59	4882.14

National Tiger Conservation Authority has technically examined the proposals for creation of new tiger reserves and in-principle approval has been given for the establishment of following Tiger Reserves in its Technical Committee meeting held on 04.08.2023 as under:

Area in Sq Km

Tiger Reserve	Core Area	Buffer	Total
Dholpur Karauli	607.34	438.07	1045.41
Kumbhalgarh	894.45	1872.04	2766.49
Total	1501.79	2310.11	3811.90

National Tiger Conservation Authority in its technical committee meeting dated 24.04.2023 has also granted in-principle approval for the expansion of the existing Tiger Reserves as under:

Area in Sq Km

Tiger Reserve	Core Area	Buffer	Total
Sariska	0.00	607.70	607.70
Ranthambhore	0.00	123.30	123.30
Mukundra Hills	201.40	990.13	1191.53
Total	201.40	1721.13	1922.53

The above approvals have been granted after technical examination of the proposals. The notification of these areas as parts of Tiger Reserves will, however be dependent on the consent of local communities and administrative approval of the State Government.

The current area under Tiger Reserve administration is 4882.14 sq km which is likely to increase to 10616.57 sq km as and when the aforementioned new Tiger Reserves and expansion of Tiger Reserves is notified.

#### **Tiger Numbers and Dispersal**

The number of tigers has gone up significantly from 32 adult tigers in 2006 to 88 in 2022 in Rajasthan and so has the phenomenon of tiger dispersal. In the past, RBT7 (later known as ST6) had moved to Keoladeo National Park from where it was translocated to Sariska on 22.02 2011. The Sultanpur tigress (RBT35) dispersed from Ranthambhore in 2010 and stayed in the Sultanpur forests till death. RBT91 (later known as MT1) dispersed to Ramgarh Vishdhari Sanctuary from where it was translocated to Mukundara Hills Tiger Reserve. RBT56 Male shifted to Datia forests in Madhya Pradesh in July 2013 while RBT38 Male stayed in Kuno forests in Madhya Pradesh from 2010 for almost 10 years before returning to Ranthambhore in October 2020. RBT71 Male

also dispersed to Kuno in April 2015. RBT72 Male, RBT92 Female and RBT80 Male dispersed to Keladevi Sanctuary and beyond and bred there.

However, since 2019, there has been a marked increase in tiger dispersal in the Chambal landscape. RBT98 dispersed to Darrah area of Mukundara Hills Tiger Reserve in February 2019, RBT115 migrated to Ramgarh Vishdhari Sanctuary in June 2020, RBT116 Male and RBT117 Female are staying and breeding in Dholpur. RBT135 Male has been known to cross Chambal river repeatedly to reach Morena and Kuno. RBT 80, RBT2304, RBT2303, and RBT135 are regularly being camera trapped in Karauli. Breeding populations of tigers have been established in Dholpur, Karauli and Bundi districts. Breeding of two tigresses in Mukundara Hills Tiger Reserve was also reported although the cubs did not survive in Darrah area inside and outside the 82 sq km enclosure.

In view of the increasing dispersal of tigers as mentioned in preceding paragraphs, understanding and reviving historical connectivity have become essential for the long-term survival of tigers in Rajasthan. This revival requires a comprehensive approach that includes habitat preservation, anti-poaching efforts, community involvement, and cooperation between different stakeholders to ensure a future for tigers in the wild.

#### **Tiger Translocation**

Rajasthan was the first state in the world to successfully translocate tigers to Sariska Tiger Reserve. This practice has been extended to Ramgarh Vishdhari Tiger Reserve and Mukundara Hills Tiger Reserve. The details of tiger translocation in Rajasthan are as under

S. No.	Tiger	Date of translocation
1.	RBT10 (ST1) Male	28.06.2008
2.	RBT1 (ST2) Female	04.07.2008
3.	RBT18 (ST3) Female	25.02.2009

4.	RBT12 (ST4) Male	20.07.2010
5.	RBT44 (ST5) Female	28.07.2010
6.	RBT7 (ST6) Male	23.02.2011
7.	RBT51 (ST9) Female	22.01.2013
8.	RBT52 (ST10) Female	23.01.2013
9.	RBT91 (MT1) Male	03.04.2018
10.	RBT106 (MT2) Female	19.12.2018
11.	RBT75 (ST16) Male	15.04.2019
12.	RBT83 (MT4) Female	12.04.2019
13.	RBT102 (RVT2) Female	16.07.2022
14.	RBT113 (ST29) Male	17.10.2022
15.	RBT110 (MT5) Male	03.11.2022
16.	RBT134 (ST30) Female	08.03.2023
17.	RBT119 (RVT3) Female	07.08.2023
18.	RBT2301 (MT6) Female	09.08.2023

Permission has been received from National Tiger Conservation Authority and Additional Director General (Wildlife) for further translocation of 1 tigress each to Sariska and Ramgarh Vishdhari Tiger Reserves. National Tiger Conservation Authority has also given its consent for translocation of 1 tiger and 3 more tigresses to northern and southern parts of Mukundara Hills Tiger Reserve.

#### **Resources for tiger conservation**

For a predator like tiger, the preference for the resources is mainly a behavioral response to availability of the resources mainly water, prey, cover density, forest type etc. and other anthropogenic pressures. In the 'Anthropocene', interference from fast-growing human population living beside the Protected Areas (who are largely dependent on the forest resources), pose a challenge to wildlife conservation. Hence, forested areas need to be protected from the anthropogenic pressures, be properly managed and appropriate conservation practices need to be

implemented for ensuring the availability of the aforementioned resources for tigers. For this purpose, resources – both financial and human are essential.

National Tiger Conservation Authority (NTCA) is the main source of funds for development, management and conservation of the 4 Tiger Reserves although the state has also increased its contribution significantly of late. Corporate Social Responsibility funds are also being increasingly utilized in all Tiger Reserves.

The situation on human resources allocated for tiger conservation is somewhat precarious with the number of sanctioned posts being less than a norm of one Forest Guard for every 5 sq km of area as stipulated in the Rajasthan Forest Policy 2023. Moreover, there is a vacancy of more than 40% in the field personnel working in wildlife areas. The situation is being mitigated by deployment of Home Guards against these vacancies to some extent. Special Tiger Protection Force has also been created for all four Tiger Reserves and made functional through deployment of Border Home Guards as per the directions of Hon'ble High Court Jaipur. Increased efforts are also being made to deploy local workforce for protection and monitoring.

#### **Activities for tiger conservation**

Village relocation process which had hitherto slowed down has been restarted as it is essential to create inviolate areas inside the tiger reserves. This activity needs vast amount of monetary support and committed manpower which is a major challenge. Payment of timely compensation to the victims to mitigate retaliatory killing of wildlife, increasing employment opportunities for local people in wildlife tourism sector, increased dialogue with local people, efforts to generate awareness among people, ecodevelopment activities, etc. are the other steps being taken to strengthen people's support for tiger conservation.

Habitat development through grassland development, plantation of browsable species and removal of exotics like *Prosopis* and *lantana*; preybase improvement through translocation; creation of preybase nurseries; water management; creation of protection infrastructure; use of modern technology like establishment of Wildlife Surveillance & Anti-Poaching System (WS&APS), use of mStripes for monitoring and solar power installation; etc. are some of the activities taken up to build up the habitable space for tigers.

## **CHAPTER 2**

# **OBJECTIVES OF LONG TERM ACTION PLAN**

In view of the increasing population of tigers in the state, it was decided in the 12<sup>th</sup> meeting of the State Board for Wildlife held on 15.07.2021 that an expert committee will be constituted for preparing a Long Term Action Plan. An Expert Committee was constituted vide order no. P.3(18) Forest/2014 dated 10.08.2021 with the following members:

- 1. Sh. Bharat Singh Kundanpur Hon'ble MLA Sangod Kota
- 2. Dr Rajesh Gopal IFS (Retired) & Member State Board for Wildlife
- 3. Representative of Director, Wildlife Institute of India
- 4. Representative of Member Secretary, National Tiger Conservation Authority
- 5. Sh. Ravi Singh Secretary General WWF India & Member State Board for Wildlife
- 6. Smt Simrat Kaur Sandhu Member State Board for Wildlife
- 7. Sh Sunil Mehta Member State Board for Wildlife
- 8. Sh Dhirendra Godha Member State Board for Wildlife
- 9. Sh Jaisal Singh Member State Board for Wildlife
- 10. Chief Wildlife Warden Rajasthan Jaipur (Convenor)

The mandate of the committee was as under:

- 1. To identify suitable habitat for tigers
- 2. Ensuring genetic diversity in tigers
- 3. Finalizing the policy on wildlife corridors

The first draft of the Long Term Action Plan was circulated to the committee members by email on 25.05.2022 and comments were sought. Based on the comments received on the draft and the deliberations of the committee, this document was redrafted and again circulated on 26.08.2023 with request to send comments till 10.09.2023. Comments were received from WWF India only and these have been incorporated in the preparation of this final draft. The salient features of this plan were highlighted in the meeting of the State Board for Wildlife held on 26.08.2023.

The plan was prepared by examining the digitized forest boundaries on GIS platform alongwith drainage patterns, terrain factors and other layers. The field experience of the committee members was incorporated in the report through discussions and information exchange. The challenges were identified as securing corridors from the source population in Ranthambhore to Sariska and the forests of southern Rajasthan and Kumbhalgarh; identification of potential habitats; and treatment of forest chunks significant for long term survival of tigers.

The metapopulation concept is the cornerstone of this whole exercise. The plan has identified **sources** or cores and **sinks** as well as **corridors** connecting the sources to ensure long term sustainability of the whole tiger population. The cores have been identified as areas which can sustain a viable population of about 50 tigers with appropriate sex and age distribution. Considering that an area of 100 sq km can sustain a minimum of 5 (1 male and 4 female) tigers in the arid climes of Rajasthan on an average, the whole state was scanned to identify contiguous forest areas of 800 to 1000 sq km. These areas were also scrutinized for their fragmentation status, density of human inhabitants and history of tiger presence to determine their feasibility.

Based on the aforesaid parameters, apart from the forests available in existing tiger reserves, proposed tiger reserves and proposed expansion of tiger reserves, only two such areas could be identified in the whole state in Baran district and southern Rajasthan. Both the areas currently have poor prey base, large amount of forest rights and fragmentation. These areas need focused preybase augmentation efforts, voluntary village relocation and reduction in fragmentation through inclusion of some revenue areas.

Long term genetic sustainability of tigers requires continuous gene exchange between the cores identified in the preceding paragraph as also with neighbouring states. Currently, translocation is being undertaken to ensure gene exchange but for long term sustainability natural corridors need to be developed. Hence, identification of corridors was taken up alongwith smaller chunks of forests along these corridors which could sustain a transitory population of migratory tigers and work as 'stepping stones' in tiger dispersal. In arid regions like Rajasthan, tigers mostly utilize drainage lines to disperse although agricultural fields are also utilized when there is standing crop in these fields. Based on these parameters 12 corridors were identified in the whole state apart from the existing corridors along the Chambal river and its tributaries. The plan also identified 3 Critical Core Elements in these corridors which need to be intensively managed to ensure the connectivity between Sariska and Ranthambhore, Mukandara Hills and Southern Rajasthan and Mukundara and forests of Baran district.

This plan has been prepared for a period of 30 years with a periodic review every 5 years as a vision plan. Implementation details will be prepared by the Forest Department after getting due permissions from National Tiger Conservation Authority (NTCA) and other statutory bodies as prescribed.

# **CHAPTER 3**

# **ENSURING GENETIC DIVERSITY IN TIGERS**

Ensuring genetic diversity in tigers is crucial for their long-term survival and health as a species. Genetic diversity refers to the variety of different genes within a population. Maintaining a diverse gene pool is essential because it helps populations adapt to changing environmental conditions, reduces the risk of inbreeding, and improves overall resilience to diseases and other threats.

Some key strategies to ensure genetic diversity in tiger populations are:

1. **Monitoring and Data Collection:** Regular monitoring and data collection on tiger populations are essential to understand their genetic makeup. Genetic studies can help identify individual tigers and assess their relatedness, allowing conservationists to make informed decisions about breeding and genetic management. Wildlife Institute of India, NCBS and CCMB have been involved in these activities in the state of Rajasthan.

Wildlife Institute of India has come out with a genetic sub division of tigers in India wherein it has been concluded that the Rajasthan population is genetically close to the Central Indian population.

Based on genome sequencing undertaken by National Centre for Biological Sciences on 57 tigers, a paper (Genomic evidence for inbreeding depression and purging of deleterious genetic variation in India tigers — Anubhab Khan, Kaushal G Patel, et al) has concluded that Ranthambhore's tigers had a high level of homozygosity, a sign that they were inbreeding, and up to twice as much as those in the large and connected populations. It is an expected conclusion in view of the fact that the Rajasthan tigers are recovering from a population bottleneck and are virtually isolated from other tiger populations. The Sariska

population is borrowed from Ranthambhore and is further inbred with siblings reproducing. Such inbreeding may create a situation like the pseudo-melanistic tigers in Simlipal.

- 2. Genetic Testing and Pedigree Analysis: Genetic testing can provide valuable information about the genetic health of individual tigers and the overall population. Pedigree analysis helps identify relationships among tigers and potential risks of inbreeding. Rajasthan is actively using pedigree analysis to identify suitable tigers for translocation.
- 3. Maintaining Connected Habitats: Tigers need large and interconnected habitats to roam freely and breed with individuals from other areas. Fragmentation of their habitats can lead to isolated populations with reduced gene flow, increasing the risk of inbreeding. The forest areas along the Chambal river were identified alongwith corridors in a report prepared in 2011 for creation of Rajiv Gandhi Biosphere Reserve. Most of the areas proposed in the Biosphere Reserve are now included in Tiger Reserves or proposed new Tiger Reserves / expanded Tiger Reserves.
- 4. **Translocation and Reintroduction:** In some cases, moving tigers from one population to another (translocation) or reintroducing tigers to areas where they have become locally extinct can help increase genetic diversity. Scientific translocation and reintroduction was undertaken for tigers for the first time in the world in Sariska Tiger Reserve and is now being replicated in other areas of Rajasthan. Significantly, tigers have also naturally dispersed to all forests along the Chambal river indicating the availability and workability of corridors as well as existence of habitable pockets for tigers in these areas.
- 5. **Captive Breeding and Management**: Some tiger populations are maintained in captivity, and careful breeding programs can be implemented to maximize genetic diversity while

avoiding inbreeding. Captive breeding has not been used for revival of tiger population in the state.

6. **Genetic Rescue**: In extreme cases of low genetic diversity, assisted reproductive techniques, such as artificial insemination or genetic rescue using individuals from other populations, may be considered as a last resort. There seems to be no requirement of genetic rescue at present. However, introduction of fresh genes from the Central Indian tiger population is currently under consideration.

Significantly, the genetic diversity present in the now extinct Sariska tigers has been lost. It is a matter of scientific investigation as to whether Sariska tigers were genetically different from Ranthambhore tigers and to what extent. If significant difference is found, then genetic rescue could be contemplated. Genetic examination of tiger trophies can provide answers to this question.

7. **Minimizing Human-Induced Threats**: Reducing human-induced threats like poaching, habitat destruction, and human-wildlife conflict can help stabilize tiger populations and prevent further decline, which can negatively impact genetic diversity.

Thus managing genetic diversity in tigers requires a multidisciplinary approach involving geneticists, conservationists, wildlife biologists, policymakers, and local communities. Conservation of the majestic tiger species for future generations will be possible by implementing the aforementioned strategies.

The basic theme for managing genetic diversity, however, is of interbreeding with geographically close populations of tigers to ensure long term survival of tigers in the State. The first assignment is to interconnect the tiger populations living or dispersing within Rajasthan. Secondly, the historical connectivity of tigers of Rajasthan has to be revived. The historical connectivity could

be with the populations of Madhya Pradesh, Maharashtra and Gujarat and possibly, with the tiger population of North India through long range dispersal along Aravallis to Haryana and thence to Shivaliks. It may be noted that about 200 year ago, the whole of India would be a continuous forest with occasional human habitations in contrast to the present situation wherein pockets of forests survive in between the human habitations, their agricultural fields, roads and other infrastructure.

The current Rajasthan tiger population has been found closest to the Central India population genetically according to the studies conducted by Wildlife Institute of India. The options for maintaining genetic diversity could be:

- i. Import of tiger from the Central India population.
- ii. Connection to Central India population by revival of corridors.

There is a school of thought which is of the opinion that there is no need of interaction for maintaining genetic diversity as deleterious genes are naturally purged. While, the other view point is that given the genetic bottleneck through which the tiger population of Rajasthan has gone through, active management is required. It would be prudent to act before hand to discount any possibility of in-breeding.

The approach in this regard needs to be finalized looking at scientific evidence. However, in the interim, providing connectivity with Central India population of tigers can be initiated as it is basically a revival of historical corridors. However, this entails working along with other neighboring states.

Request has already been made to National Tiger Conservation Authority for providing tigers from other states. Genetic studies have also been initiated by NCBS to compare genetic closeness with tigers of Tadoba Andheri Tiger Reserve and Bandhavgarh Tiger Reserve.

## **CHAPTER 4**

# **IDENTIFICATION OF SUITABLE HABITAT FOR TIGERS**

To serve increasing tiger population, the management strategies and policies for that area have to be more intensive, robust and focused. There is massive scope of increasing the habitat available for tigers by safeguarding the existing tiger habitats as well as by creating new areas for tigers in the extant forest patches in Rajasthan. A long term planning is required to manage increasing tiger population which will help in creating a safe environment for these last crucial population of wild tigers. This long-term planning is directed at primarily identifying suitable habitat and important corridors for tiger movement for the next 30 years.

### POTENTIAL AREAS OF NORTHERN RAJASTHAN

In northern part of Rajasthan, there are mainly 4 districts adjacent to Sariska Tiger Reserve, where there is a good possibility of tiger movement – Alwar, Jaipur, Sikar and Jhunjhunu. Sikar and Jhunjhunu districts already have notified protected areas namely Shakhambari Conservation Reserve, Mansamata Conservation, Bansiyal Khetri Conservation Reserve, Bansiyal-Khetri-Bagore Conservation Reserve and Beed Jhunjunu Conservation Reserve. Notification of some other Conservation Reserves like Baleshwar and Buchara are under consideration. The landscape of both the districts is characterized by hilly terrain with scattered trees of *Anogeissus pendula* (Dhonk), *Boswellia serrata* (Salar), and *Acacia senegal* (Kumta) and undulating flat areas of grass lands. Terrain is mostly undulating and annual variation in temperature is quite high. In summers, the temperature soars to 48°C and in winters it drops to near about 0°C to -3°C. According to Champion and Seth (1968) classification, the vegetation falls under tropical dry deciduous forests, Northern tropical dry deciduous forest, Dry deciduous scrub forests, Desert thorn forests, Desert

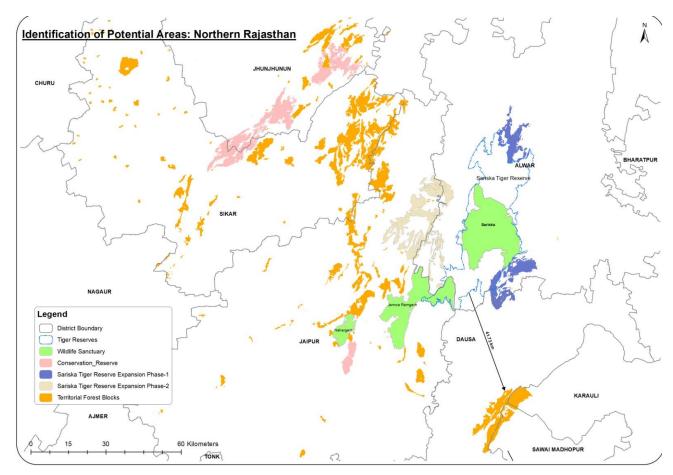
dune forests, Tropical thorn forests. *Prosopis juliflora* (Vilayati babool), an exotic has spread in various parts of these forests.

In Jaipur district, Jamwa Ramgarh sanctuary is located adjacent to Sariska Tiger Reserve and together with Nahargarh sanctuary and Jhalana Aamagarh Conservation Reserve it forms an important potential and historical area for tiger movement. In addition to that, there are many good dense forests in many forest blocks of the Alwar Forest Division, adjoining the Sariska Tiger Reserve.

	Table 4.1: List of Protected Areas in Northern Rajasthan				
S.No.	Туре	Name	District	Area (Sq.Km.)	
1	Sanctuary	Jamwaramgarh	Jaipur	300.00	
2	Sanctuary	Nahargarh	Jaipur	52.40	
3	Sanctuary	Sariska	Alwar	491.99	
4	Conservation Reserve	Bansial-Khetri	Jhunjhunu	70.18	
5	Conservation Reserve	Bansial-Khetri Bagore	Jhunjhunu	39.66	
6	Conservation Reserve	Beed Jhunjhunu	Jhunjhunu	10.4748	
7	Conservation Reserve	Mansa mata	Jhunjhunu	102.31	
8	Conservation Reserve	Shakambari	Sikar, Jhunjhunu	131.00	
9	Conservation Reserve	Jhalana Aamagarh	Jaipur	35.07	
10	Tiger Reserve	Sariska (Overlapping)	Alwar, Jaipur	1213.34	
Prelim	Preliminary Notifications				
1	Sanctuary	Sariska 'A'	Alwar	03.01	
2	National Park	Sariska (Overlapping)	Alwar	405.93	

Forest areas, falling in between Sariska Tiger Reserve and Dausa division (e.g. Gol Main, Gol A and Gol B and nearby forest blocks, which will be treated elsewhere) along with the territorial forest blocks of the Jaipur, Jaipur North, Alwar, Sikar and Jhunjhunu Forest Division, adjacent to protected areas (Table 4.1), collectively make an important potential area for tiger distribution.

These Protected Areas and adjoining forest blocks are put together in the following map. As can be observed from the map, potential forest areas identified for tiger movement have discontinuities which need to be overcome by creation of corridors.



Map 4.1: Potential Areas for development of tiger habitat: Northern Rajasthan

The forest blocks in the vicinity of Protected Areas which are potential tiger habitats are given in table 4.2 below.

<u>Tal</u>	Table 4.2: List of territorial forest blocks in Northern Rajasthan which are potential				
		<u>tiger habitat</u>			
S.No.	Division	Block	Legal status	Area (in ha)	
1	Alwar	Shahpur	Reserved	6657.54	
2	Alwar	Shahpur	Unclassed	46.93	
3	Alwar	Hazipur	Reserved	854.14	
4	Alwar	Chandoli	Protected	184.51	
5	Alwar	Bala Dehra	Protected	73.15	
6	Alwar	Hazipur Dadikar Main	Protected	138.96	
7	Alwar	Hazipur Dadikar A	Protected	80.54	
8	Alwar	Hazipur Dadikar B	Protected	97.53	
9	Alwar	Hazipur Dadikar C	Protected	198.97	
10	Alwar	Hazipur Dadikar D	Protected	30.54	
11	Alwar	Hazipur Jageer	Protected	321.69	
12	Alwar	Todiyar B	Protected	71.37	

13	Alwar	Tedhapur	Unclassed	196.20
14	Alwar	Dhaukdi	Unclassed	62.78
15	Alwar	Baldehra	Unclassed	229.99
16	Alwar	Nadanhedi	Unclassed	205.17
17	Alwar	Nagal Sedhu	Unclassed	40.57
18	Alwar	Vigota (Compartment 1 & 4)	Reserved	950.41
19	Alwar	Daulatpura	Reserved	3163.12
20	Alwar	Goth	Protected	66.84
21	Alwar	Vigota 1966	Protected	1719.00
22	Alwar	Daulatpura Main	Protected	125.10
23	Alwar	Daulatpura B	Protected	440.55
24	Alwar	Daulatpura C	Protected	365.53
25	Alwar	Shrichandpura	Protected	71.31
26	Alwar	Kundaroli Main	Protected	353.51
27	Alwar	Kundaroli A	Protected	20.94
28	Alwar	Kundala Main	Protected	460.02
29	Alwar	Kundala A	Protected	97.91
30	Alwar	Kundala B	Protected	104.04
31	Alwar	Kundala C	Protected	143.94
32	Alwar	Rajpur	Protected	850.62
33	Alwar	Vigota 1975	Protected	798.87
34	Alwar	Nimla	Protected	340.55
35	Alwar	Prempura	Protected	29.25
36	Alwar	Todi	Protected	55.49
37	Alwar	Bandh Ramsagar	Unclassed	128.84
38	Alwar	Kundaroli	Unclassed	64.78
39	Alwar	Pratapgarh May Lodhawas	Reserved	112.55
40	Alwar	Pratapgarh May Hamirpur	Reserved	176.54
41	Alwar	Rundh Lodhawas	Reserved	60.70
42	Alwar	Rundh Aagar	Reserved	257.23
43	Alwar	Rundh Jheeri	Reserved	518.00
44	Alwar	Suratgarh	Reserved	194.25
45	Alwar	Hamirpur	Reserved	273.92
46	Alwar	Lalpura	Reserved	114.32
47	Alwar	Pachpadi	Reserved	37.18
48	Alwar	Madhogarh	Reserved	125.20
49	Alwar	Rundh Narayanpur	Reserved	2330.99
50	Alwar	Pratapgarh	Protected	168.94
51	Alwar	Lalpura	Protected	127.19
52	Alwar	Kaled A	Protected	141.92
53	Alwar	Kaled B	Protected	244.18
54	Alwar	Kaled C	Protected	16.47
55	Alwar	Jagannathpura	Protected	179.33
56	Alwar	Bhavta Main	Protected	74.64
57	Alwar	Bhavta A	Protected	62.77

58	Alwar	Kabligarh	Protected	125.55
59	Alwar	Bamanwas	Protected	111.11
60	Alwar	Bandrol	Protected	86.29
61	Alwar	Malutana	Protected	333.81
62	Alwar	Gadhbasai A	Protected	143.00
63	Alwar	Gadhbasai B	Protected	65.21
64	Alwar	Gadhbasai C	Protected	30.11
65	Alwar	Hinsla	Protected	50.63
66	Alwar	Panchpadhi A	Protected	33.73
67	Alwar	Panchpadhi B	Protected	14.95
68	Alwar	Aagar Main	Protected	215.78
69	Alwar	Aagar A	Protected	128.70
70	Alwar	Aagar B	Protected	148.86
71	Alwar	Aagar D	Protected	48.65
72	Alwar	Aagar E	Protected	15.42
73	Alwar	Aagar F	Protected	8.68
74	Alwar	Jheeri A	Protected	123.95
75	Alwar	Jheeri B	Protected	58.60
76	Alwar	Jheeri C	Protected	182.91
77	Alwar	Jheeri D	Protected	29.75
78	Alwar	Jheeri E	Protected	2.15
79	Alwar	Jheeri F	Protected	5.77
80	Alwar	Jheeri G	Protected	5.25
81	Alwar	Jheeri H	Protected	21.76
82	Alwar	Bhudiyawas A	Protected	62.90
83	Alwar	Bhudiyawas B	Protected	38.42
84	Alwar	Bhudiyawas C	Protected	27.83
85	Alwar	Bhudiyawas D	Protected	32.72
86	Alwar	Bhudiyawas E	Protected	21.83
87	Alwar	Narhait	Protected	194.89
88	Alwar	Aamka A	Protected	130.47
89	Alwar	Aamka B	Protected	88.22
90	Alwar	Bhadaj A	Protected	228.13
91	Alwar	Bhadaj B	Protected	101.59
92	Alwar	Chandpura	Protected	144.25
93	Alwar	Aangari	Protected	4.51
94	Alwar	Badhgujran	Unclassed	28.73
95	Alwar	Lalpura	Unclassed	5.93
96	Alwar	Jagannathpura	Unclassed	6.13
97	Alwar	Bandhrol	Unclassed	2.40
98	Alwar	Gadhbasai A	Unclassed	34.59
99	Alwar	Aagar A	Unclassed	16.70
100	Alwar	Bhadaj B	Unclassed	28.32
101	Alwar	Hameerpur (Compartment 6 & 7)	Protected	510.00
102	Alwar	Beroj	Protected	409.71

103	Alwar	Khanpur Mev	Unclassed	40.96
104	Alwar	Kheratha	Unclassed	98.90
105	Alwar	Nangal Singalka	Unclassed	8.85
106	Alwar	Beroj	Unclassed	181.43
107	Alwar	Suretha	Unclassed	243.04
108	Dausa	Dhapavan Urvadi Rehdiya Number 35	Protected	2237.14
109	Dausa	Lambi Dungri Koleshwar Number 37	Protected	2469.72
110	Dausa	Balaji Ka Thobra	Protected	356.07
111	Jaipur North	Chharsa	Protected	58.00
112	Jaipur North	Kerli	Protected	366.00
113	Jaipur North	Manoharpur Bishangarh	Protected	2031.00
114	Jaipur North	Chatarpura Piplod Devipura	Protected	2410.00
115	Jaipur North	Saiwad Main	Protected	408.00
116	Jaipur North	Shahpura	Protected	96.00
117	Jaipur North	Sanjay Van Main	Protected	67.16
118	Jaipur North	Sanjay Van A	Protected	13.42
119	Jaipur North	Bidara No. 51	Reserved	196.00
120	Jaipur North	Kumbhavas Gadhi Badodiya No. 52	Reserved	1939.00
121	Jaipur North	Badodiya No. 53	Reserved	456.00
122	Jaipur North	Badi Line 43 A	Reserved	2660.00
123	Jaipur North	Torda 50	Reserved	82.00
124	Jaipur North	Badi Line 43 B	Reserved	2222.00
125	Jaipur North	Aatela Bhabhru No. 51	Reserved	3005.00
126	Jaipur North	Bheem Tala Ki Dungri 39	Reserved	40.00
127	Jaipur North	Gopipura Ki Dungri 40	Reserved	34.00
128	Jaipur North	Papad Ki Dungri 41	Reserved	35.00
129	Jaipur North	Gothnari Dungri 42	Protected	34.00
130	Jaipur North	Badi Line 43 C	Reserved	3879.00
131	Jaipur North	Talva Biyajar No. 44	Reserved	2836.00
132	Jaipur North	Biyajar Dungri No. 45	Reserved	322.00
133	Jaipur North	Beri Ki Makdeta Dungri No. 46	Reserved	861.00
134	Jaipur North	Paldhi Berki Makedeta Ki Dungri No.	Reserved	61.00
135	Jaipur North	Paldhi Berki Makedeta Ki Dungri No.	Reserved	12.00
136	Jaipur North	Gol Badshahpura No. 47 A	Reserved	28.00
137	Jaipur North	Gol Badshahpura No. 47 B	Reserved	50.00
138	Jaipur North	Bandrol Plantation	Protected	81.00
139	Jaipur North	Gol Badshahpura No. 47	Protected	542.00
140	Jaipur North	Taleka Bas Urf Berd Ki Dungri No. 49	Reserved	2568.00
141	Sikar	Buchara A	Protected	166.70
142	Alwar	Patan	Unclassed	38.65
143	Alwar	Malutana	Protected	333.81
144	Alwar	Machadi	Reserved	505.86
145	Alwar	Jamdoli 1966	Protected	372.63
146	Alwar	Jamdoli 1975	Protected	1186.59
147	Alwar	Bhuleri	Protected	162.25

148	Alwar	Ishwana	Protected	270.30
149	Alwar	Surer Main	Protected	1025.70
150	Alwar	Surer A	Protected	77.19
151	Alwar	Rajgarh 1966	Protected	513.32
152	Jaipur North	Danteel Ki Pahadi	Protected	127.00
153	Jaipur North	Panchudala A	Protected	152.00
154	Jaipur North	Bopiya	Protected	192.45
155	Jaipur North	Gadrata	Protected	4036.35
156	Jaipur North	Panchudala Main	Protected	1866.00
157	Jaipur North	Badi Line No 43 A	Reserved	2660.00
158	Jaipur North	Torda No 50	Protected	82.00
159	Jhunjhunu	Kharkhara 49	Protected	4288.96
160	Jhunjhunu	Nalpur 51	Protected	1015.16
161	Jhunjhunu	Beesa 50	Protected	1647.93
162	Jhunjhunu	Kankriya 57A	Protected	1210.90
163	Sikar	Jilo	Unclassed	151.00
164	Sikar	Balupura A	Protected	23.50
165	Sikar	Dokan	Protected	5281.00
166	Jaipur / Sikar	Ganwari No 68	Protected	19927.00
167	Jaipur / Sikar	Hashampur	Protected	2573.90
168	Sikar	Kalat Khera	Unclassed	11.67
169	Sikar	Kharjo	Protected	1088.50
170	Sikar	Patan	Protected	825.00
171	Sikar	Sohanpura	Protected	107.00
172	Sikar	Khandela	Protected	4001.00
173	Sikar	Chakghas Khandela	Reserved	200.00

National Tiger Conservation Authority has approved the expansion of Sariska Tiger Reserve by 607.66 sq km in various phases in its Technical Committee meeting dated 24.04.2023. Forest blocks upto S. No. 141 in the above table have been included partially or fully in this expansion. The process for notification of these new areas will be taken up in due course.

In the whole landscape discussed above, only Sariska offers a habitat which can sustain a minimum viable population of tigers with other chunks of forests only providing shelter to a few tigers each. The connectivity of these forests to each other will ensure a habitat for dispersing tigers. The habitat in these chunks may need improvement in density, removal of *Prosopis juliflora*, grassland development, development of water resorces and preybase improvement.

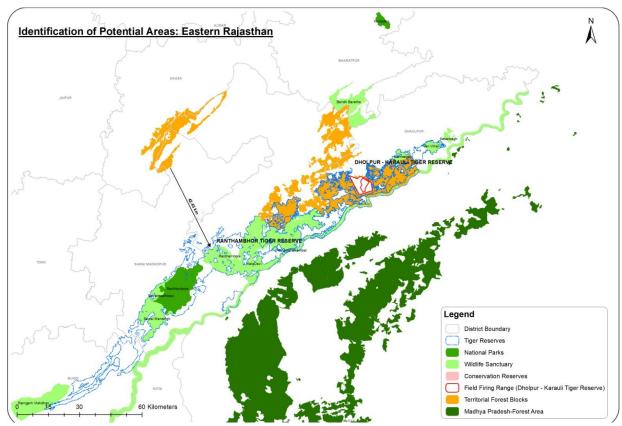
Historically too, this area would have hosted a low density of tigers as the conditions become increasingly arid as one travels north and west. Sariska will be the nucleus of the tiegr population and needs significant inetrventions in the form of village relocation, mitigation of anthropogenic pressures and enhancement of infrastructure. Corridors need to be developed from Sariska to eastern Rajasthan to ensure genetic connectivity and hence long term survival of this population. The corridors towards the northern patches of potential tiger habitats have not been identified in this report since there is a significant measure of connectivity due to the Aravalli range and these corridors are not connecting major tiger habitats.

## II. POTENTIAL AREAS OF EASTERN RAJASTHAN

In eastern Rajasthan, there are mainly 4 districts adjacent to Ranthambore Tiger Reserve, which have good potential of tiger distribution – Sawaimadhopur, Dholpur, Karauli and Bharatpur. Eastern Rajasthan has 2 national parks and 8 wildlife sanctuaries (Table 4.3).

Table 4.3: List of Protected Areas in Eastern Rajasthan				
S.No.	Type	Name	District	Area (sq.km.)
1	National Park	Keoladeo	Bharatpur	28.73
2	National Park	Ranthambhore	Sawai Madhopur	282.03
3	Sanctuary	Band Baretha (including extension)	Bharatpur	368.50
4	Sanctuary	Keladevi	Karauli, Sawai Madhopur	676.82
5	Sanctuary	Kesarbagh	Dholpur	14.76
6	Sanctuary	National Gharial	Kota, Bundi, Sawai Madhopur, Karauli, Dholpur	564.03
7	Sanctuary	Ramsagar	Dholpur	34.40
8	Sanctuary	Sawaimadhopur	Sawaimadhopur	131.30
9	Sanctuary	Sawaimansingh	Sawaimadhopur	113.07
10	Sanctuary	Van Vihar	Dholpur	25.60

Ranthambore Tiger Reserve is connected with all the protected areas of Eastern Rajasthan. Adding forest areas of Dausa (e.g. Gol Main and nearby forest blocks), Karauli, Sawai Madhopur, Dholpur Forest Division (Table 4.4) along with the forest area of Hadoti in Rajasthan and the forests of Madhya Pradesh state (mainly, Sheopur and Morena Forest Divisions), with above mentioned protected areas will make one of the largest landscape for tigers in India. It may be pointed out that a Biosphere Reserve was proposed in this landscape in 2011 which had an area of almost 11000 sq km along the Chambal river on the Rajasthan side. A larger area exists on the other bank of Chambal river in Madhya Pradesh as well as in Baran, Kota and Jhalawar districts of Rajasthan. Thus the complete landscape may be well over 25000 sq km.



Map 4.2: Potential Areas for development of tiger habitat: Eastern Rajasthan

The list of forest blocks adjoining the protected areas listed in Table 4.3 and elsewhere with a potential for development into a tiger habitat in the future is given below:

Table 4.4: List of territorial forest blocks in Eastern Rajasthan which are potential tiger					
-	<u>habitat</u>				
S.No.	Division	Forest Block	Legal Status	Area (in sq km)	
1.	Dholpur	Rijhoni	Protected	9647.32	
2.	Dholpur	Jhiri	Protected	7027.35	
3.	Dholpur	Madanpur	Protected	12510.86	
4.	Dholpur	Sone ka Gurja	Protected	8375.76	
5.	Dholpur	Kudinna	Protected	4617.69	
6.	Dholpur	Talabshahi	Unclassed	1200.00	
7.	Dholpur	Gajpura	Unclassed	1025.15	
8.	Dholpur	Rudhera	Unclassed	322.00	
9.	Dholpur	Khanpur	Unclassed	561.00	
10.	Dholpur	Jhiri	Unclassed	40.89	
11.	Dholpur	Shahpura	Unclassed	5.23	
12.	Dholpur	Kudinna	Unclassed	16.50	
13.	Karauli	Aund	Protected	3345.99	
14.	Karauli	Baherda	Protected	6585.99	

15.	Karauli	Panchauli	Protected	1343.69
16.	Karauli	Ghatli Jakhoda	Protected	1656.74
17.	Karauli	Gadwar	Protected	798.56
18.	Karauli	Kakarda	Protected	7165.00
19.	Karauli	Alwat ki Guwadi	Protected	2247.41
20.	Karauli	Bugdar B	Protected	324.03
21.	Karauli	Viram ki Guwadi	Protected	6456.98
22.	Karauli	Rodhai	Protected	1124.84
23.	Karauli	Chirmil Kho Kased	Protected	14352.89
24.	Karauli	Nidar	Protected	6375.08
25.	Dholpur	Khurdia Main	Protected	2527.87
26.	Dholpur	Khurdia B	Protected	292.52
27.	Dholpur	Dhaur	Unclassed	1068.16
28.	Dholpur	Bathuakho	Protected	1301.42
29.	Dholpur	Bathuakho A	Protected	126.42
30.	Dholpur	Damoh	Reserved	791.56
31.	Dholpur	Ramdha A	Protected	1938.80
32.	Dholpur	Ramdha B	Protected	183.59

Forest blocks upto S. No. 24 in table above are proposed to be fully or partially included in proposed Dholpur Karauli Tiger Reserve alongwith Vanvihar Sanctuary, Ramsagar Sanctuary, adjoining part of National Gharial Sanctuary and part of Keladevi Sanctuary which is not part of Ranthambhore Tiger Reserve. This area has existing dispersed population of tigers which is successfully breeding. Bandh Baretha Sanctuary (including the extension for which intention for declaration of Sanctuary has been issued) is also close to this tiger landscape and is connected to Ranthambhore Tiger Reserve.

Expansion of the buffer of Ranthambhore Tiger Reserve by 123.30 sq km has been approved by National Tiger Conservation Authority in the meeting of its Technical Committee on 13.04.2023 and proposed to be done by State Government in due course. Final approval of Dholpur Karauli Tiger Reserve has also been granted by National Tiger Conservation Authority in its Technical Committee meeting on 04.08.2023.

The proposed Tiger Reserve will have the following area:

S. No.	DESCRIPTION OF AREA	AREA (in ha)
	Tiger Habitat –I (Core-I) OR Dholpur Sanctuary	111111 (111 114)
1	Jhiri Protected Forest	7027.35
2	Madanpur Protected Forest	12510.86
3	Sone ka Gurja Protected Forest	8375.76
4	Jhiri Unclassed Forest	40.8859
5	Shahpura Unclassed Forest	5.23
J	Forest land diverted for establishment of Sarmathura Field Firing	3.23
6	Range (Excluding area of Damoh and Rijhoni forest blocks i.e.	
Ü	5250.00 - 2314.68 - 791.56 = 2143.76 ha	-2143.76
	Area of forest blocks overlapping with National Gharial Sanctuary	2110170
7	(Jhiri 677.85 ha, Madanpur 515.36 ha, Sone ka Gurja 1167.04	
•	approx)	-2360.25
	Area of Madanpur and Jhiri blocks upto 1 km outside the	
8	Sarmathura Field Firing Range (Jhiri 1045.77 ha, Madanpur 659.01	
	ha approx)	-1704.78
	Area of Madanpur block from outer northern boundary upto 1 km	
9	inside	-1325.187
	Total	20426.1089
Critical	Tiger Habitat II (Core II) (part of National Gharial Sanctuary)	
	r district	
1	Kudinna Protected Forest (part)	600.65
2	Jhiri Protected Forest (part)	677.85
3	Madanpur Protected Forest (part)	515.36
4	Sone ka Gurja Protected Forest (part)	1167.04
5	Revenue Area	2349.10
	district	23 17.10
1	Aund Protected Forest (part)	153.00
2	Panchauli Protected Forest (part)	425.00
3	Gadhwar Protected Forest (part)	332.00
4	Rodhai Protected Forest (part)	830.00
5	Chirmil Kho Kased Protected Forest (part)	392.00
6	Revenue Area	4638.00
0	TOTAL	12080.00
Critical	Tiger Habitat III (Core III) (part of Keladevi Sanctuary)	12000.00
	Viram ki Guadi Protected Forest except compartment 7 (275 ha), 11	
1	and 12 (415 ha)	5766.984
2	Nidar Protected Forest except compartment 10 (150 ha)	6225.076
	Chirmil Kho Kased Protected Forest except compartment 41, 51, 54	0223.070
3	and 55 (392 ha)	13960.894
4	Kakarda Protected Forest compartment 29 to 32	1150.000
5	Albat ki Guadi Protected Forest compartment 5, 6, 7, 12, 13 and 17	1125.000
	TOTAL	28227.954
Buffer		20221.734

1	Dholpur Ramsagar Protected Forest (Ramsagar Sanctuary)	3441.010
2	Vanvihar Protected Forest (Vanvihar Sanctuary)	2566.740
3	Area of Kudinna Protected Forest outside National Gharial Sanctuary	4017.04
4	Khanpur Forest Block	561.000
5	Talabshahi Forest Block	1210.000
6	Gajpura Forest Block	1025.150
7	Area of Rudhera village between Ramsagar & Vanvihar Sanctuary including Rudhera Forest Block (322 ha)	1834.460
8	Area of Rijhoni Protected Forest excluding area of Sarmathura Field Firing Range (9647.32-2314.68)	7332.640
9	Area of Madanpur Protected Forest and Jhiri Protected Forest which is not included in proposed Dholpur Sanctuary or Sarmathura Field Firing Range (Jhiri 1045.77 ha, Madanpur 659.01 ha)	1704.780
10	Kudinna Unclassed Forest	16.500
District	Karauli	
1	Viram ki Guadi Compartment 7 in Keladevi Sanctuary	275.000
2	Viram ki Guadi Compartment 11 and 12	415.000
3	Nidar Compartment 10	150.000
4	Area of Rodhai Protected Forest outside National Gharial Sanctuary (1124.836-830.000)	294.836
5	Area of Aund Protected Forest outside National Gharial Sanctuary (3345.99-153.00)	3292.990
6	Beherda Protected Forest	6685.990
7	Area of Panchauli Protected Forest outside National Gharial Sanctuary (1343.69-425.00)	918.690
8	Ghatli Jakhoda Protected Forest	1656.740
9	Alvat ki Guadi Protected Forest Compartment 1 to 4, 8 to 11, 14 to 16 (2247.414-1125)	1122.414
10	Bugdar B Protected Forest	324.028
11	Area of Gadhwar Protected Forest outside National Gharial Sanctuary (798.557-332.00)	466.557
12	Kakarda Protected Forest Compartment 1 to 6 and 14 to 28 (7165-2670)	4495.805
TOTAL	1	43807.370
		104541.43
GRANI	OTOTAL	or1045.41
		sq km

# III. Potential Areas of Hadoti Region

Hadoti Region of Rajasthan includes the districts of Bundi, Baran, Jhalawar and Kota which lies between Malwa Plateau in the east, Aravalli range in the west and Marwar plateau in the west south side, on the border with Madhya Pradesh. The major river is the Chambal River, with its tributaries Kalisindh, Parvati, Parwan and Chapi. Mostly, mixed miscellaneous forests are found in this region of Rajasthan.

Hadoti Region has 1 National Park, 6 Sanctuaries and 9 Conservation Reserves (Table 4.6). Hadoti Region has two tiger reserves namely Mukundra Hills Tiger Reserve and recently notified Ramgarh Vishdhari Tiger Reserve, which are both well connected to the Ranthambore Tiger Reserve.

Table 4.6: List of Protected Areas in Hadoti Region of Rajasthan				
S.No.	Type	Name	District	Area (sq.km.)
1	National Park	Mukundara Hills	Kota, Chittorgarh	199.55
2	Sanctuary	Darrah	Kota, Jhalawar	227.64
3	Sanctuary	Jawaharsagar	Kota, Bundi, Chittorgarh	194.59
4	Sanctuary	Shergarh	Baran	81.67
5	Sanctuary	Bhensrodgarh	Chittorgarh	201.40
6	Sanctuary	Ramgarh Vishdhari	Bundi	303.05
7	Sanctuary	National Ghariyal	Kota, Bundi, Sawaimadhopur, Karauli, Dholpur	564.03
8	Conservation Reserve	Shahbad	Baran	189.39
9	Conservation Reserve	Ummedganj Pakshi Vihar	Kota	2.72
10	Conservation Reserve	Shahbad Taleti	Baran	178.84
11	Conservation Reserve	Sorsan A	Baran	16.107
12	Conservation Reserve	Sorsan B	Baran	4.27
13	Conservation Reserve	Sorsan C	Baran	0.7563
14	Conservation Reserve	Ramgarh	Baran	38.0864
15	Conservation Reserve	Banjh Amli	Baran	14.621
16	Tiger Reserve	Ramgarh Vishdhari Tiger Reserve	Bundi	1501.89

Territorial forest blocks of Bundi, Baran, Jhalawar, Kota and Chittorgarh districts, adjacent to the above protected areas form important potential areas for tiger movement (Table 4.7).

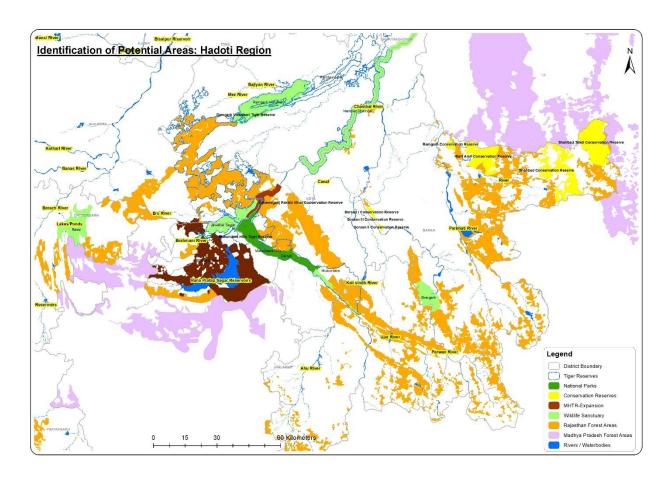
Table 4.7: List of territorial forest blocks in Hadoti region of Rajasthan which are potential				
<u>tiger habitat</u>				
S.No.	District	Name	Legal Status	Area (in sq.km.)
1	Baran	Khairai Motipura	Protected	1085.75
2	Baran	Mothpur Kundi	Protected	1496.87
3	Baran	Beed Govindpura	Protected	134.43
4	Baran	Beedghas Baldevpura	Protected	64.60
5	Baran	Beedghas Khedli Gadyam	Protected	67.97
6	Baran	Beedghas Musai Gujren	Protected	4.56
7	Baran	Beedghas Nimoda	Protected	51.94
8	Baran	Beedghas Parliya	Protected	9.41
9	Baran	Chainpuria	Protected	275.09
10	Baran	Sundi Baniwal	Protected	41.44
11	Baran	Umriwala Sunda	Protected	9.17
12	Baran	Ratanpura I-II	Protected	393.57
13	Baran	Dara	Protected	169.35
14	Baran	Fulbadoda	Protected	154.43
15	Baran	Kawai Chambal Fertilizers	Protected	237.93
16	Baran	Beed Kawai Khurd	Protected	16.79
17	Baran	Kawai II	Unclassed	57.74
18	Baran	Beedghas Kawaikalam	Protected	22.05
19	Baran	Deelod	Protected	2625.84
20	Baran	Bezadpur A	Protected	4793.59
21	Baran	Setkolu	Protected	2615.31
22	Baran	Jhinjhini B	Protected	2156.38
23	Baran	Sarthal B	Protected	1061.69
24	Baran	Harnavda Shahji	Protected	5165.21
25	Baran	Rayi B	Protected	2422.19
26	Baran	Bilendi	Protected	7294.82
27	Baran	Jhinjhini A	Protected	2431.15
28	Baran	Khandela A	Protected	4619.46
29	Baran	Khiriya B	Protected	3830.65
30	Baran	Ratai	Protected	5966.92
31	Baran	Telni B	Protected	2200.61
32	Baran	Rajpur A	Protected	1287.20
33	Baran	Telni C	Protected	1619.09
34	Baran	Sitabadi	Protected	6905.85
35	Baran	Bakanpura A	Protected	1318.04

36	Baran	Bhanwargarh	Protected	2625.90
37	Baran	Ummedsagar	Protected	2197.43
38	Baran	Gadi Ghatta	Protected	4842.61
39	Baran	Banjh Aamli	Protected	14621.91
40	Baran	Jaiswa A	Protected	1052.77
41	Baran	Nayagaon Ranwasa	Protected	2187.16
42	Baran	Gopalpura Premnagar	Protected	2166.04
43	Baran	Balapura	Protected	3873.16
44	Baran	Chhatarganj B	Protected	2610.21
45	Baran	Jaitpura A	Protected	1561.54
46	Baran	Nahargarh	Protected	2418.08
47	Baran	Seemlod	Protected	1223.76
48	Baran	Ahmadi Nayagaon	Protected	2736.96
49	Baran	Jalwada	Protected	1441.86
50	Baran	Seegri	Protected	3066.39
51	Baran	Moyda Durjanpura	Protected	3013.03
52	Baran	Ghatti B	Protected	2026.38
53	Baran	Amlavda	Protected	1143.73
54	Baran	Barapati B	Protected	4535.69
55	Bundi	Gudha Neem Ka Kheda	Reserved	4165.69
56	Bundi	Sathoor	Reserved	2126.55
57	Bundi	Munder	Reserved	2580.31
58	Bundi	Bhimlat	Reserved	1388.17
59	Bundi	Kanti Astoli	Reserved	2366.80
60	Bundi	Gararda	Reserved	1434.90
61	Bundi	Dhorela Gararda	Reserved	3065.13
62	Bundi	Dabi Palkan	Reserved	3442.37
63	Bundi	Amlat Anarkhoh	Reserved	4202.36
64	Bundi	Lambakhoh	Reserved	1052.65
65	Bundi	Maradi	Reserved	2792.23
66	Bundi	Dhaneshwar	Reserved	1639.19
67	Bundi	Khadipur	Reserved	1226.82
68	Bundi	Karondi	Reserved	2747.26
69	Bundi	Kachalia	Protected	4347.44
70	Bundi	Dasaliya A	Reserved	1567.16
71	Bundi	Rampuriya	Reserved	2578.45
72	Bundi	Gunwar	Reserved	4672.98
73	Bundi	Jakhmund	Protected	2276.29
74	Bundi	Umarmata	Reserved	1869.72
75	Bundi	Datunda	Reserved	2867.11
76	Bundi	Khinya	Reserved	1926.60
77	Bundi	Nahargarh Bhojgarh	Reserved	3628.45
78	Bundi	Owan	Protected	2180.50
79	Bundi	Maradi Bandi Ka Kheda	Protected	1985.35

80	Jhalawar	Aametha	Protected	1108.27
81	Jhalawar	Baandri	Protected	1203.78
82	Jhalawar	Nesh A	Protected	2859.04
83	Jhalawar	Madanpuriya	Protected	1838.40
84	Jhalawar	Ratadevi	Protected	1777.90
85	Jhalawar	Chanpaldevi	Protected	2268.00
86	Jhalawar	Maankund	Protected	3196.21
87	Jhalawar	Gadiya Reechhwa	Protected	1329.36
88	Jhalawar	Surajpura	Protected	3581.34
89	Jhalawar	Bhalta	Protected	1964.67
90	Jhalawar	Teejbardi	Protected	2936.16
91	Jhalawar	Bairagarh	Protected	2001.76
92	Jhalawar	Reechhwa A	Protected	1556.50
93	Jhalawar	Mashalpura A	Reserved	2299.73
94	Jhalawar	Mashalpura B	Reserved	8504.40
95	Jhalawar	Raipur Baalgarh	Reserved	2633.80
96	Jhalawar	Field Trial	Reserved	1161.71
97	Jhalawar	Khokanda Dhanwas	Reserved	3240.80
98	Jhalawar	Borband	Protected	2622.46
99	Jhalawar	Harigarh	Protected	3069.56
100	Jhalawar	Banya	Protected	1854.49
101	Jhalawar	Piplaj Barapati	Protected	1455.56
102	Jhalawar	Dhanoda	Protected	2327.13
103	Jhalawar	Hatola Akawad Khurd	Protected	2433.50
104	Jhalawar	Malanwasa Taraj	Protected	2436.27
105	Jhalawar	Bapawar Kalan Barapati	Protected	3719.65
106	Jhalawar	Mahuwakheda Bhootrada	Protected	2143.34
107	Jhalawar	Bagher	Protected	3862.34
108	Jhalawar	Aareda	Protected	1804.27
109	Jhalawar	Basad	Protected	1651.36
110	Jhalawar	Kotda Chamargarh A	Protected	1923.70
111	Jhalawar	Kotda Kajliya 1	Protected	1535.26
112	Kota	Bara Pati Bapawar	Protected	1806.89
113	Kota	Bar Kalaji Kishor Sagar	Protected	5613.34
114	Kota	Bawhri Khara Block	Protected	1457.89
115	Kota	Hanknkesapa Futa Block	Reserved	2542.42
127	Kota	Sakatpur	Protected	1892.34
128	Kota	Avali Rojai Block	Reserved	2721.92
129	Kota	Akhelgarh Block	Reserved	2931.52
130	Kota	Bharkia Block	Reserved	1935.83
131	Kota	Dar Devi Block	Reserved	2528.57
132	Kota	Khera Jagpura Block	Reserved	3032.49
133	Kota	Futa Block	Protected	2081.10
134	Kota	Kasar B Block	Protected	1323.77

135	Kota	Barkalaji Block	Reserved	14571.94
136	Kota	Dolia Block	Reserved	9574.21
137	Kota	Khimach (A) Block	Protected	3491.67

These forest blocks along with the forest area of Madhya Pradesh (mainly Palpur-Kuno and Gandhi Sagar Wildlife Sanctuary; and Neemuch, Sheopur, Morena & Shivpuri Forest Divisions) form an important habitat for tigers as indicated in the map below. Though these areas have higher rainfall and some of the forests found here are the densest in Tajasthn, these areas are low in preybase and have problems of encroachment, illegal mining, etc. Some of the forest has not recovered from coupe felling undertaken in the past. Presence of drainage lines in good numbers, contiguity of forest and presence of tigers in the vicinity makes this area as the next candidate for establishment of Tiger Reserve.



Map 4.3: Potential Areas for development of tiger habitat: Hadoti Region of Rajasthan

In this region, expansion of Mukundara Hills Tiger Reserve of 990.13 sq km Buffer and 201.40 sq km Core has been approved by National Tiger Conservation Authority in the meeting of its Technical Committee on 24.04.2023 and its notification is proposed to be undertaken by the State Government in due course.

### IV. Potential Areas of Southern Rajasthan

Most of the compact forest area of Rajasthan is confined to the southern parts of the state. Southern part of Rajasthan includes Chittorgarh, Pratapgarh, Udaipur, Dungarpur, Banswara, and Sirohi districts. Mostly, mixed miscellaneous forests are found in the southern region of Rajasthan. The forest area mainly consists of *Anogeissus latifolia, Terminalia tomentosa, Anogeissus pendula, Terminalia arjuna, Albizia lebbeck, Terminalia chebula, Dalbergia paniculata* etc. and its associates. Southern region of Rajasthan has 8 wildlife sanctuaries and 3 conservation reserves as listed in the table below:

	Table 4.8: List of Protected Areas in Southern Rajasthan						
S.No.	Туре	Name	District	Area (sq.km.)			
1	Sanctuary	Bassi	Chittorgarh	138.69			
2	Sanctuary	Jaisamand	Udaipur	52.34			
3	Sanctuary	Kumbhalgarh	Rajsamand, Udaipur, Pali	610.528			
4	Sanctuary	Mount Abu	Sirohi	326.10			
5	Sanctuary	Phulwari ki nal	Udaipur	511.41			
6	Sanctuary	Sajjangarh	Udaipur	5.19			
7	Sanctuary	Sitamata	Udaipur, Chittorgarh	422.94			
8	Sanctuary	Todgarh Raoli	Rajsamand, Ajmer, Pali	495.27			
9	Conservation Reserve	Jawaibandh	Pali	19.79			
10	Conservation Reserve	Jawai Bandh II	Pali	61.98			
11	Conservation Reserve	Baghdarrah	Udaipur	3.69			

This region has the proposed Kumbhalgarh Tiger Reserve whose constitution is as follows:

	Table 4.9: Area details of proposed Kumbhalgarh Tiger Reserve					
		Forest	Blocks of Tiger Reserve			
S. No.	WLS	Range	Forest Block	Legal status	Area (in ha)	
			Core Area			
1	Kumbhalgarh	Bokhara	Bhanpura	Reserved	998.57	
2	Kumbhalgarh	Bokhara	Bisma	Reserved	496.67	
3	Kumbhalgarh	Bokhara	Bokhara	Reserved	1432.29	
4	Kumbhalgarh	Bokhara	Kadech	Reserved	346.43	
5	Kumbhalgarh	Bokhara	Magga ka Mal	Reserved	2296.93	
6	Kumbhalgarh	Bokhara	Majawara	Reserved	1084.96	
7	Kumbhalgarh	Bokhara	Malgarh	Reserved	491.92	
8	Kumbhalgarh	Bokhara	Mamadev ki Buj	Reserved	1948.32	
9	Kumbhalgarh	Bokhara	Padrada	Reserved	1624.84	

10	Kumbhalgarh	Bokhara	Semad	Reserved	897.42
11	Kumbhalgarh	Bokhara	Umarna	Reserved	459.51
12	Kumbhalgarh	Desuri	Bagol	Reserved	3928.90
13	Kumbhalgarh	Desuri	Desuri	Reserved	1880.40
14	Kumbhalgarh	Desuri	Ghanerav*	Protected	289.08
15	Kumbhalgarh	Desuri	Ghanerav	Reserved	2102.19
16	Kumbhalgarh	Desuri	Kot	Reserved	1296.50
17	Kumbhalgarh	Jhilwara	Bassi Darada	Reserved	870.38
18	Kumbhalgarh	Jhilwara	Dewair (part)	Reserved	254.00
19	Kumbhalgarh	Jhilwara	Dholia	Reserved	451.43
20	Kumbhalgarh	Jhilwara	Ghatra and Kali Ghanti	Reserved	1580.67
21	Kumbhalgarh	Jhilwara	Jhilwara	Reserved	2010.25
22	Kumbhalgarh	Jhilwara	Piprelu Main	Reserved	98.50
23	Kumbhalgarh	Jhilwara	Roop Nagar	Reserved	900.18
24	Kumbhalgarh	Jhilwara	Sevantri	Reserved	513.06
25	Kumbhalgarh	Jhilwara	Umarwas	Reserved	1285.24
26	Kumbhalgarh	Kumbhalgarh	Areth	Reserved	323.31
27	Kumbhalgarh	Kumbhalgarh	Dhana	Reserved	2217.19
28	Kumbhalgarh	Kumbhalgarh	Kotra	Reserved	1305.85
29	Kumbhalgarh	Kumbhalgarh	Palar	Reserved	2505.79
30	Kumbhalgarh	Kumbhalgarh	Qila Kumbhalgarh	Reserved	196.00
31	Kumbhalgarh	Sadri	Bijapur	Reserved	8010.35
32	Kumbhalgarh	Sadri	Latara	Reserved	3565.79
33	Kumbhalgarh	Sadri	Sadri**	Reserved	7127.59
34	Kumbhalgarh	Sadri	Sewarai	Reserved	6049.61
					60840.12
	*	Desuri	Muchhala Mahavir Temple	excluded	-3.28
	**	Sadri	Ranakpur Temple excluded		-9.84
	TOTAL				60827.00
1	Todgarh Raoli	Devgarh	Baghana	Reserved	1392.96
2	Todgarh Raoli	Devgarh	Chapli	Reserved	2164.41
3	Todgarh Raoli	Devgarh	Dewair (part)	Reserved	1463.20
4	Todgarh Raoli	Jojawar	Bhagoda	Reserved	3143.66
5	Todgarh Raoli	Jojawar	Jojawar	Reserved	3339.79
6	Todgarh Raoli	Devgarh	Viram Guda Main	Reserved	108.00
7	Todgarh Raoli	Devgarh	Charplan	Reserved	881.84
8	Todgarh Raoli	Devgarh	Bijasar	Reserved	35.21
9	Todgarh Raoli	Devgarh	Aliziria Sarupa	Reserved	461.36
10	Todgarh Raoli	Devgarh	Viram Guda A Block	Reserved	26.00
11	Todgarh Raoli	Devgarh	Mandawar Pipli	Reserved	1432.5371
12	Todgarh Raoli	Devgarh	New Pipli	Reserved	277.4600
13	Todgarh Raoli	Jojawar	Siriyari	Reserved	2661.5300
14	Todgarh Raoli	Ravli	Modiya	Reserved	88.2246
15	Todgarh Raoli	Ravli	Baghmal	Reserved	2981.4249
16	Todgarh Raoli	Ravli	Satukhera	Reserved	1317.2985

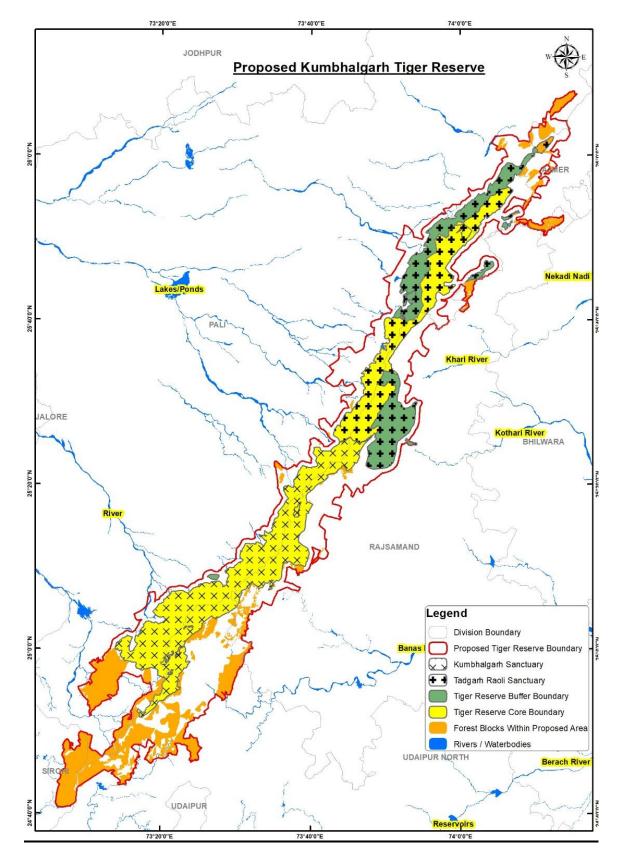
17	Todgarh Raoli	Ravli	Mediya	Reserved	1213.6953
18	Todgarh Raoli	Ravli	Todgarh	Reserved	2107.6776
19	Todgarh Raoli	Bijaguda	Bagdi	Reserved	2155.9500
20	Todgarh Raoli	Bijaguda	Sirma	Reserved	1366.0000
	TOTAL	, J			28618.23
	GRAND TOTA	L			89445.23
		Bu	ffer Area of Sanctuaries		•
1	Todgarh Raoli	Bijaguda	Bada Guda	Reserved	2646.7500
2	Todgarh Raoli	Bijaguda	Khodia	Reserved	2400.9100
3	Todgarh Raoli	Bijaguda	Bagdi Kot kirana	Reserved	208.3200
4	Todgarh Raoli	Bijaguda	Kot Kirana	Reserved	192.8800
5	Todgarh Raoli	Bijaguda	Kalab	Reserved	2887.4900
6	Todgarh Raoli	Bijaguda	Kuneja	Reserved	980.8700
7	Todgarh Raoli	Jojawar	Saran	Reserved	3594.4900
8	Todgarh Raoli	Jojawar	Kantaliya	Reserved	1903.0400
9	Todgarh Raoli	Ravli	Banzari	Reserved	642.6636
10	Todgarh Raoli	Ravli	Kanat Thok	Reserved	177.6635
11	Todgarh Raoli	Ravli	Negdia Rodiana	Reserved	106.0314
12	Todgarh Raoli	Ravli	Ranatan Bhagwanpura	Reserved	161.8800
13	Todgarh Raoli	Ravli	Dadola	Reserved	2.0235
14	Todgarh Raoli	Ravli	Mevasa	Reserved	41.2794
15	Todgarh Raoli	Ravli	Balachart	Reserved	114.1254
16	Todgarh Raoli	Devgarh	Chapli Main	Reserved	52.0000
17	Todgarh Raoli	Devgarh	Chapli A	Reserved	296.0000
18	Todgarh Raoli	Devgarh	Dewair Main	Reserved	325.6840
19	Todgarh Raoli	Devgarh	Dewair A	Reserved	90.5500
20	Todgarh Raoli	Devgarh	Barjal Main	Reserved	659.0000
21	Todgarh Raoli	Devgarh	Barjal A	Reserved	526.6200
22	Todgarh Raoli	Devgarh	Jeeran Kuanthal A	Reserved	19.2200
23	Todgarh Raoli	Devgarh	Jeeran Kuanthal B	Reserved	234.8300
24	Todgarh Raoli	Devgarh	Halela	Reserved	191.0000
25	Todgarh Raoli	Devgarh	Baghana A	Reserved	134.0000
26	Todgarh Raoli	Devgarh	Piperelen A	Reserved	13.0000
27	Todgarh Raoli	Devgarh	Nardas Guda	Reserved	303.0000
	TOTAL				18905.3208
1	Kumbhalgarh	Sadri	Modiya Block		212.6800
					19118.0008
	_	Buffe	er Area outside Sanctuaries		
1	Ajmer	Beawar	Biyakheda Chilawara	Protected	212.95
2	Ajmer	Beawar	Dhaadhola	Protected	216.50
3	Ajmer	Beawar	Jawaaja Puner	Protected	371.24
4	Ajmer	Beawar	Kheda Neemdi	Protected	274.37
5	Ajmer	Beawar	Kotra	Protected	682.70
6	Ajmer	Beawar	Loomba Aajma	Reserved	29.54
7	Ajmer	Beawar	Naidkhurd Kalakheda	Protected	219.20

8	Ajmer	Beawar	Naikalan	Protected	107.85
9	Ajmer	Beawar	Nayagaon	Protected	51.79
10	Ajmer	Beawar	Puner	Protected	125.45
11	Ajmer	Beawar	Raawatmal Nayakheda	Protected	201.21
12	Ajmer	Beawar	Roodhaana	Reserved	741.79
13	Ajmer	Beawar	Seeliberi	Reserved	199.10
14	Ajmer	Beawar	Taaragarh I	Protected	60.72
					3494.41
1	Bhilwada	Asind	Bhandsi (part)	Unclassed	77.57
2	Bhilwada	Asind	Kasia (part)	Unclassed	70.18
					147.75
1	Pali	Bali	Beda	Reserved	5576.00
2	Pali	Bali	Beda Jagir	Protected	1456.19
3	Pali	Sendra	Borwad	Reserved	933.00
4	Pali	Sendra	Dipawas	Reserved	347.00
5	Pali	Desuri	Kot Closure	Protected	79.82
6	Pali	Sendra	Manjevla (Kanuja)	Reserved	325.00
7	Pali	Bali	Nana	Reserved	4455.87
8	Pali	Bali	Nana B	Protected	444.00
9	Pali	Desuri	Nayagaon	Protected	35.58
10	Pali	Desuri	Nursery Selibandh	Protected	1.00
11	Pali	24	Nursery Fulad	Protected	1.10
12	Pali	Marwar	Plantation Kalyanpura	Protected	317.60
13	Pali	junction	Siryari	Protected	61.44
14	Pali	Desuri	Sumer Closure (Tikhi Plantation)	Protected	174.90
15	Pali	Desuri	Tikhi Mandpura (Jod)	Reserved	226.72
16	Pali	Sendra	Chhang		1211.00
			<u> </u>		15646.22
1	Rajsamand	Jhilwara	Aanka Ki Kui	Protected	10.00
2	Rajsamand	Jhilwara	Amba Ka Khadra	Protected	33.00
3	Rajsamand	Kumbhalgarh	Antri Banas	Protected	170.00
4	Rajsamand	Jhilwara	Bahda Se Jambooda Ka Bada	Protected	49.00
5	Rajsamand	Jhilwara	Bansa	Protected	321.00
6	Rajsamand	Kumbhalgarh	Bari Magra Bhim Magra	Protected	87.00
7	Rajsamand	Kumbhalgarh	Bavji Ka Mathara	Protected	80.00
8	Rajsamand	Bhim	Bhagawad	Reserved	1053.50
9	Rajsamand	Bhim	Biliyawas	Reserved	560.00
10	Rajsamand	Kumbhalgarh	Devi Mata Ka Mathara	Protected	15.00
11	Rajsamand	Kumbhalgarh	Haldiyon Ka Mathara Se Bheema Talai	Protected	111.00
12	Rajsamand	Kumbhalgarh	Jarga	Reserved	167.36
13	Rajsamand	Kumbhalgarh	Jungle Bagor Part A	Protected	25.00
14	Rajsamand	Kumbhalgarh	Jungle Bagor Part B	Protected	38.00

15	Rajsamand	Kumbhalgarh	Jungle Bagor Part C	Protected	208.00
16	Rajsamand	Kumbhalgarh	Jungle Jaitaran Ka Bada Magra	Protected	275.00
17	Rajsamand	Kumbhalgarh	Jungle Salarmala	Protected	28.00
18	Rajsamand	Kumbhalgarh	Jungle Shamdua Ki Jhaal	Protected	10.00
19	Rajsamand	Kumbhalgarh	Jungle Teeka	Protected	38.00
20	Rajsamand	Kumbhalgarh	Jungle Mali Part A	Protected	33.00
21	Rajsamand	Jhilwara	Kalbeliyo Ki Magri	Protected	23.00
22	Rajsamand	Jhilwara	Khaira Ki Naal	Protected	34.00
23	Rajsamand	Kumbhalgarh	Khairadia	Protected	227.00
24	Rajsamand	Jhilwara	Kheda	Protected	119.00
25	Rajsamand	Kumbhalgarh	Kheda A	Protected	3.03
26	Rajsamand	Jhilwara	Lal Beri	Protected	36.00
27	Rajsamand	Kumbhalgarh	Mali Part B	Protected	108.00
28	Rajsamand	Kumbhalgarh	Odar Ki Khadri	Protected	74.00
29	Rajsamand	Kumbhalgarh	Peepana Ka Khula Jungle	Protected	282.00
30	Rajsamand	Jhilwara	Poothia Ki Singi	Protected	12.00
31	Rajsamand	Kumbhalgarh	Sanwaliya Mamadev	Protected	355.00
32	Rajsamand	Kumbhalgarh	Tankra Ka Mathara	Protected	111.00
33	Rajsamand	Jhilwara	Tejo Ka Gudha	Protected	249.00
34	Rajsamand	Jhilwara	Thuravad Ka Mathara	Protected	161.00
35	Rajsamand	Kumbhalgarh	Umria Baashan	Protected	62.00
36	Rajsamand	Kumbhalgarh	Veniya Bagmal	Protected	207.00
					5374.89
1	Sirohi	Pindwada	Pahad Kalan	Protected	7004.10
1	Udaipur North	Sayra	Aadiwali Barwdi A	Protected	587.00
2	Udaipur North	Sayra	Aadiwali Barwdi B	Protected	158.00
3	Udaipur North	Sayra	Aamla Ka Chora	Protected	64.00
4	Udaipur North	Gogunda	Baguni	Protected	372.00
5	Udaipur North	Sayra	Bangad Ka Khula Jungle	Protected	41.00
6	Udaipur North	Sayra	Bhanupur Ka Khula Jangal	Protected	279.00
7	Udaipur North	Dewla	Bhutwar	Protected	402.89
8	Udaipur North	Sayra	Bora Mangra -A	Protected	269.00
9	Udaipur North	Sayra	Bora Mangra -B	Protected	161.00
10	Udaipur North	Sayra	Chakdia	Protected	340.00
11	Udaipur North	Dewla	Champa Ki Naal	Reserved	2316.20
12	Udaipur North	Sayra	Dedhjap Ka Manthara	Protected	113.00
13	Udaipur North	Sayra	Devmaal	Protected	277.00
14	Udaipur North	Sayra	Jarga	Reserved	2799.00
15	Udaipur North	Sayra	Jungal Paveri	Protected	28.00
16	Udaipur North	Sayra	Kamba Ka Khula Jangal	Protected	189.00
17	Udaipur North	Dewla	Khila	Reserved	1669.70
18	Udaipur North	Sayra	Ladiyo Ki Ghati	Reserved	518.00
19	Udaipur North	Sayra	Leiwa Ki Beri	Protected	89.00
20					

21	Udaipur North	Sayra	Man Bhang Ki Dang / Venpura Ki Nedi	Protected	54.00
22	Udaipur North	Dewla	Mewaro Ka Math -A	Protected	1696.31
23	Udaipur North	Dewla	Mewaro Ka Math -B	Protected	846.88
24	Udaipur North	Sayra	Naligra Mangra Kachora	Protected	129.00
25	Udaipur North	Dewla	Nand Kua	Reserved	1531.84
26	Udaipur North	Sayra	Nani Ka Mathara	Protected	113.00
27	Udaipur North	Dewla	Peepli Kheda	Protected	1034.77
28	Udaipur North	Sayra	Peepli Wali Khali Se Khali Gafal Ki Chhati	Protected	67.00
29	Udaipur North	Sayra	Pipalipaj Ka Mathara	Protected	217.00
30	Udaipur North	Sayra	Rabachh	Reserved	1636.00
31	Udaipur North	Sayra	Rawla Beed	Protected	93.00
32	Udaipur North	Sayra	Rupan Ka Mathara	Protected	10.00
33	Udaipur North	Sayra	Sageti	Reserved	515.00
34	Udaipur North	Sayra	Salar Mala Tegda	Protected	300.00
35	Udaipur North	Sayra	Salota Mankavri	Protected	56.00
36	Udaipur North	Sayra	Samla	Protected	621.00
37	Udaipur North	Sayra	Tamta Ki Jaal	Protected	235.00
38	Udaipur North	Sayra	Thana Ka Manthara	Protected	113.00
39	Udaipur North	Sayra	Thanawali Nedi	Protected	260.00
40	Udaipur North	Sayra	Umra Ka Manthara	Protected	256.00
41	Udaipur North	Sayra	Umrana Mamdev	Protected	123.00
					21240.59
	GRAND TOTA	L			52907.95

In-principle approval for establishment of Kumbhalgarh Tiger Reserve has been granted by National Tiger Conservation Authority in its Technical Committee meeting held on 04.08.2023. The notification of the Tiger Reserve will be undertaken by the State Government in due course with the consent of local people. While the geography of the Tiger Reserve has been improved by adding buffer area for increasing the width, the current habitat lies within the narrow Kumbhalgarh Sanctuary which has a good Sambhar population. Other areas need to be improved rapidly, especially those under *Prosopis juliflora* and village relocation needs to be taken up on priority before tigers can be translocated to the area. The map of the proposed Tiger Reserve is as under:



Map 4.4: Proposed Kumbhalgarh Tiger Reserve

There are many territorial forest blocks of the Chittorgarh, Pratapgarh, Udaipur, Dungarpur, Banswara, and Sirohi Forest Division, adjacent to protected areas, which form important continuous area for tiger movement.

Table 4.10: List of territorial forest blocks in Southern Rajasthan which are potenti				
S.No.	District	Name	Legal status	Area (in ha)
1	Banswara	Hindolmaal	Protected	1001.46
2	Banswara	Naal Raghabav A	Protected	1179.55
3	Banswara	Medimaal Bhandar	Protected	1255.05
4	Banswara	Bhataul A	Protected	1084.07
5	Banswara	Vadita Hillage A	Protected	2038.50
6	Banswara	Jagmer Jogimaal A	Protected	5744.38
7	Banswara	Rohal Undwela A	Protected	2057.07
8	Banswara	Sagbari Bhootkhora D	Protected	1431.06
9	Chittorgarh	Charchha	Protected	2957.00
10	Chittorgarh	Baghpura	Reserved	1147.00
11	Chittorgarh	Rajgarh	Protected	5791.00
12	Chittorgarh	Chandakheri Palka	Protected	1307.00
13	Chittorgarh	Katunda Mahupura	Protected	1432.00
14	Chittorgarh	Menal	Protected	2030.00
15	Chittorgarh	Samaria Rawarda	Protected	2650.00
16	Chittorgarh	Karondia	Protected	2408.00
17	Chittorgarh	Marna	Protected	1970.00
18	Chittorgarh	Shakbor	Reserved	1351.00
19	Chittorgarh	Udpura	Reserved	1229.00
20	Chittorgarh	Dhuwalia	Reserved	1046.00
21	Chittorgarh	Bijaypur	Reserved	1394.00
22	Chittorgarh	Gorasia Block	Reserved	1270.00
23	Chittorgarh	Banda	Reserved	1475.00
24	Chittorgarh	Bandar Mutha	Reserved	4923.00
25	Chittorgarh	Nagpura Kanera	Reserved	1599.00
26	Chittorgarh	Bhunjar	Reserved	2035.00
27	Chittorgarh	Mandesra A	Protected	1660.00
28	Chittorgarh	Kudal Khera	Reserved	1426.00
29	Chittorgarh	Gadwala Dharana	Reserved	1830.00
30	Chittorgarh	Samli Pathar	Reserved	4162.00
31	Chittorgarh	Bageshwar	Reserved	6.00
32	Chittorgarh	Dholeshwar	Protected	18.00
33	Chittorgarh	Satpura Odiwala	Reserved	15.00
34	Chittorgarh	Senva Shikargarh	Protected	118.00
35	Chittorgarh	Makadia	Protected	20.00
36	Chittorgarh	Thukrawa Barada	Protected	91.00
37	Chittorgarh	Sarlai	Protected	46.00

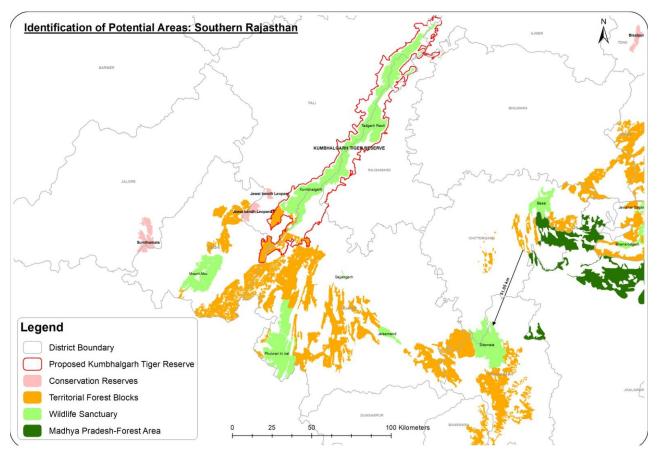
38	Chittorgarh	Beed Delawash	Unclassed	20.00
39	Chittorgarh	Jawada	Reserved	2170.00
40	Chittorgarh	Kaglia Kho	Protected	2817.00
41	Chittorgarh	Kaglia Kho B	Protected	1186.00
42	Chittorgarh	Kulthi	Protected	5262.00
43	Chittorgarh	Chorda Ki Dhar	Protected	1314.00
44	Chittorgarh	Doodi Talai	Protected	1199.00
45	Chittorgarh	Kirpapur	Reserved	3936.00
46	Chittorgarh	Dhamania Block	Reserved	161.00
47	Chittorgarh	Kalkalia Block	Protected	110.00
48	Chittorgarh	Kalwaria Block	Protected	29.00
49	Chittorgarh	Machhla Block	Reserved	148.00
50	Chittorgarh	Majewaria Block	Reserved	93.00
51	Chittorgarh	Maval Bordia	Protected	360.00
52	Chittorgarh	Satpura Khalsa	Reserved	401.00
53	Chittorgarh	Lotmagra Block	Protected	227.00
54	Chittorgarh	Nahargarh Achalpura	Protected	113.00
55	Chittorgarh	Bhawaria	Reserved	238.00
56	Chittorgarh	Kannauj Block	Protected	699.00
57	Chittorgarh	Bansria	Protected	932.00
58	Chittorgarh	Alsigarh A&B	Protected	69.00
59	Chittorgarh	Munjal Arnoda	Reserved	42.00
60	Chittorgarh	Potla A&B	Protected	46.64
61	Chittorgarh	Mohna Matasara	Reserved	14381.00
62	Chittorgarh	Dotera Barkhera	Reserved	5991.00
63	Chittorgarh	Kankeshwar A, B, C	Protected	1131.00
64	Chittorgarh	Kherli	Reserved	6917.00
65	Pratapgarh	Lasadiya Block	Protected	1612.00
66	Pratapgarh	Umarkota Block	Reserved	9698.00
67	Pratapgarh	Chitrimata Block	Reserved	6473.00
68	Pratapgarh	Devaliya	Protected	1230.00
69	Pratapgarh	Jhar	Protected	5299.00
70	Pratapgarh	Nalwa	Reserved	3934.00
71	Pratapgarh	Nakor	Protected	3442.00
72	Pratapgarh	Chiklar	Protected	2974.00
73	Pratapgarh	Malda	Protected	2840.00
74	Pratapgarh	Devla Block	Protected	1634.00
75	Pratapgarh	Shakerkand	Reserved	2425.00
76	Pratapgarh	Karmaliya A	Reserved	3747.00
77	Pratapgarh	Pahada	Reserved	2167.00
78	Pratapgarh	Nalwa	Protected	2120.00
79	Pratapgarh	Gothra	Reserved	1129.00
80	Pratapgarh	Satakuri Block	Reserved	1138.00
81	Pratapgarh	Bhanawata Block	Protected	1392.00
82	Pratapgarh	Dhadhari	Protected	2183.00

83	Pratapgarh	Pancha Gurha	Reserved	1105.00
84	Pratapgarh	Arampura Block	Reserved	3188.00
85	Pratapgarh	Mandur	Reserved	2626.00
86	Pratapgarh	Sihad	Protected	1318.00
87	Pratapgarh	Chari	Protected	1646.00
88	Pratapgarh	Mahuval	Protected	1164.66
89	Pratapgarh	Hadiya Maal Kushalpura A	Protected	1506.51
90	Pratapgarh	Sagbari Bhootkhora D	Protected	1431.06
91	Pratapgarh	Hudabavji	Protected	4135.72
92	Pratapgarh	Poona Pathar Narughati	Protected	3582.66
93	Pratapgarh	Banghati Bori	Protected	1857.72
94	Pratapgarh	Gamargarh Pandiya A	Protected	3303.24
95	Pratapgarh	Ranijhar	Protected	1041.00
96	Pratapgarh	Lalgarh	Protected	2931.00
97	Pratapgarh	Rakhat Kila	Protected	1085.00
98	Pratapgarh	Wangar Block	Protected	1899.93
99	Pratapgarh	Mehandi Khera	Protected	2898.00
100	Pratapgarh	Rampuria	Protected	6993.00
101	Pratapgarh	Jhanagarh Block	Protected	4210.00
102	Pratapgarh	Zaunda	Protected	1515.00
103	Sirohi	Bhainsasingh	Reserved	3113.80
104	Sirohi	Bhakhar	Reserved	31034.00
105	Sirohi	Forest Chotila	Reserved	1162.30
106	Sirohi	Arnua	Protected	10437.70
107	Sirohi	Arnua II	Unclassed	1717.00
108	Sirohi	Lautana	Protected	3592.70
109	Sirohi	Meerpur	Protected	2883.40
110	Sirohi	Chotila Radbar	Protected	2835.40
111	Sirohi	Maatarmata	Protected	11014.00
112	Sirohi	Raajal Daabela	Protected	4533.00
113	Sirohi	Wada Kheda	Reserved	4331.50
114	Udaipur	Augana	Protected	1800.38
115	Udaipur	Balidiya	Reserved	1313.00
116	Udaipur	Harat Ki Ot	Protected	1261.00
117	Udaipur	Raidari	Protected	1083.05
118	Udaipur	Aadiwash	Protected	2406.00
119	Udaipur	Gadota	Reserved	2282.82
120	Udaipur	Ramkunda	Reserved	3897.10
121	Udaipur	Salar Uf Aakhsalar Ka Ghata	Reserved	2949.72
122	Udaipur	Sar Ki Ghati	Protected	1481.05
123	Udaipur	Suraj Bara	Reserved	2088.03
124	Udaipur	Oda	Reserved	1511.72
125	Udaipur	Nala Uf Chittodia - B	Protected	1288.19
126	Udaipur	Madadi	Protected	5439.00
127	Udaipur	Peepal Bara	Protected	3110.00

128	Udaipur	Som Part - II	Reserved	4571.00
129	Udaipur	Jhameri	Reserved	1108.00
130	Udaipur	Mohammed Falasia	Reserved	1157.00
131	Udaipur	Naal Sandol	Reserved	1916.00
132	Udaipur	Nainbara	Reserved	6203.81
133	Udaipur	Narayani	Protected	1300.00
134	Udaipur	Sera	Reserved	3846.00
135	Udaipur	Suberi	Reserved	1346.00
136	Udaipur	Peepli - A	Protected	1180.37
137	Udaipur	Bhakara	Reserved	2024.82
138	Udaipur	Katrwas	Reserved	3157.71
139	Udaipur	Pareda	Reserved	2218.07
140	Udaipur	Saangwada	Reserved	9712.92
141	Udaipur	Jabala - A	Protected	1662.33
142	Udaipur	Chanawada	Reserved	1541.44
143	Udaipur	Saru - C	Protected	3519.88
144	Udaipur	Khajuri - A	Protected	3487.31
145	Udaipur	Borimlan	Protected	1037.80
146	Udaipur	Panduna	Protected	2103.52
147	Udaipur	Javar Sigat Wada - B	Protected	1947.57
148	Udaipur	Dholagarh	Protected	1275.48
149	Udaipur	Kukda	Reserved	2095.69
150	Udaipur	Kuwachiya	Reserved	1204.60
151	Udaipur	Manpur	Protected	1150.06
152	Udaipur	Padwa	Reserved	2427.35
153	Udaipur	Serveni Ven	Reserved	10231.78
154	Udaipur	Salumbar	Reserved	1056.31
155	Udaipur	Sitawali	Reserved	675.82
156	Udaipur	Sunar Mata	Protected	54.00
157	Udaipur	Gamda Paal	Unclassed	232.77
158	Udaipur	Rajpura	Protected	176.00
159	Udaipur	Dingri	Reserved	4780.06
160	Udaipur	Ajabara	Protected	1170.85
161	Udaipur	Palodda	Reserved	1263.00
162	Udaipur	Javar Sigat Wada A	Protected	2023.64
163	Udaipur	Maneeol Urf Kali Ghati	Reserved	2897.99
164	Udaipur	Alshigarh Marwar	Reserved	2097.00
165	Udaipur	Undari Poplati	Protected	1245.00
166	Udaipur	Harnia Mai Dagal	Protected	2261.00
167	Udaipur	Borbal	Reserved	1916.00
168	Udaipur	Samar A	Protected	2017.00
169	Udaipur	Kala Mangra	Protected	1388.00
170	Udaipur North	Khokharia Ki Naal	Protected	6443.00
171	Udaipur North	Torana I	Reserved	7197.55
172	Udaipur North	Pipal Maal	Reserved	5951.76

173	Udaipur North	Mewaro Ka Math - A	Protected	1696.31
174	Udaipur North	Merpur	Protected	4566.63
175	Udaipur North	Bokan	Reserved	1085.00
176	Udaipur North	Naalmokhi	Reserved	4240.00
177	Udaipur North	Shivadia	Reserved	2942.00
178	Udaipur North	Dholiya	Reserved	2199.00
179	Udaipur North	Ladan	Reserved	2651.50
180	Udaipur North	Toran II	Reserved	5430.40
181	Udaipur North	Subra Subri	Reserved	6231.90
182	Udaipur North	Her	Reserved	1711.00
183	Udaipur North	Bhuri Dhaber - A	Protected	1236.84
184	Udaipur North	Umariya Part A	Reserved	1395.70
185	Udaipur North	Samoli	Reserved	2811.38
186	Udaipur North	Kayari	Reserved	4930.87
187	Udaipur North	Kangwas	Protected	2255.40
188	Udaipur North	Kukawas	Reserved	3699.50
189	Udaipur North	Teensara	Protected	6657.46
190	Udaipur North	Ambua	Reserved	1165.00

There have been demands for expansion of Sitamata Wildlife Sanctuary and Jaisamand Wildlife Sanctuary and proposals have been sought for their expansion. The area has good floral diversity and density, dense forests, good network of drainage lines and good rainfall, the area faces significant issues relating to forest rights, encroachments, low preybase and weed infestation. The area also doesnot have natural connectivity to any tiger population. Special efforts will have to be taken to rapidly increase the preybase in the area, develop corridors and resolve forest rights issues. The forest blocks listed above and Protected Areas in the southern region along with the forest area of Madhya Pradesh (mainly Neemuch) form a significant habitat for tigers as indicated in the map.



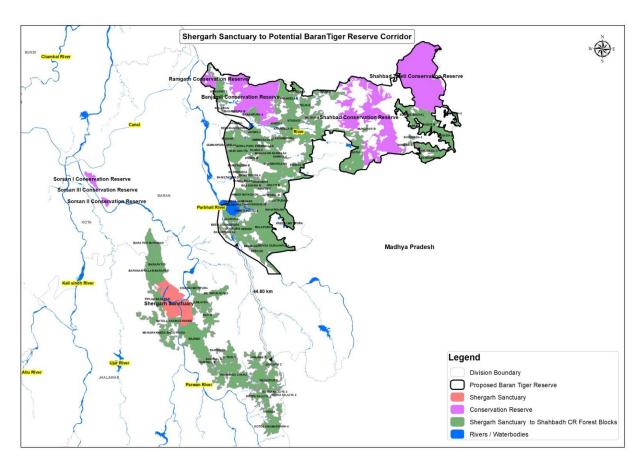
Map 4.5: Potential Areas for development of tiger habitat: Southern Rajasthan

#### POTENTIAL TIGER RESERVES

Currently four tiger reserves are notified in the state and two others, namely Dholpur Karauli Tiger Reserve and Kumbhalgarh Tiger Reserve have received final and in-principle approval of National Tiger Conservation Authority respectivel. Apart from these, the following contiguous areas of more than 800 sq. km. have the potential of being declared as Tiger Reserves after suitable habitat and preybase improvements in future. Upon restoration of corridors, these areas are likely to be reoccupied again by tigers. These areas include southern areas of state around Sitamata Sanctuary, Phulwari ki Nal Sanctuary, Mount Abu Sanctuary and nearby forests and eastern Rajasthan in forest areas of Baran division as discussed below:

#### **Baran Tiger Reserve (potential)**

The forests of Baran division are extensive but low on preybase with the densest forests of Rajasthan present in Shahbad area (in addition to some forests in Sariska). The Conservation Reserves of Shahbad, Shahbad Taleti, Banjh Amli and Ramgarh (crater) are connected together by forest blocks in the district as well as forest and Protected Areas of Madhya Pradesh along river Kuno. Shergarh Sanctuary and its neighboring forests are also connected to this area through drainage lines. The whole landscape includes about 1291.92 sq km of connected forests alongwith another chunk including Shergarh Sanctuary and its neighboring forests. The map shows the interconnectivity between the different Protected Areas and forest blocks in the area.



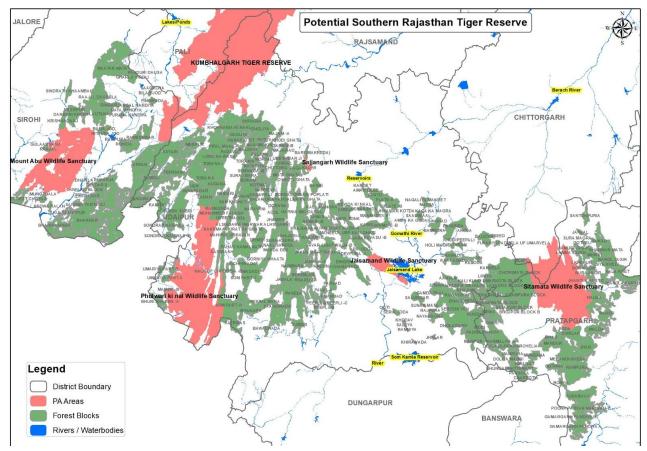
4.6: Potential Baran Tiger Reserve

	Table 4.11: Potential Baran Tiger Reserve							
	Forest Blocks that can be considered for inclusion in Tiger Reserve							
S. No.	Division	Range	Block	Legal status	Area (in ha)			
1	Baran	Nahargarh	Bilasgarh B	Protected	618.61			
2	Baran	Nahargarh	Dhikoniya	Protected	718.65			
3	Baran	Nahargarh	Ghatti A	Protected	156.65			
4	Baran	Chhipabarod	Jhinjhini C	Protected	249.34			
5	Baran	Kelwada	Khandela B	Protected	121.86			
6	Baran	Kelwada	Khedla	Protected	695.11			
7	Baran	Kelwada	Khiriya A	Protected	316.81			
8	Baran	Nahargarh	Ahmadi Nayagaon	Protected	2736.96			
9	Baran	Kelwada	Khandela A	Protected	4619.46			
10	Baran	Kelwada	Khiriya B	Protected	3830.65			
11	Baran	Chhipabarod	Bilendi	Protected	7294.82			
12	Baran	Nahargarh	Jaitpura B	Unclassed	419.18			
13	Baran	Kelwada	Lakshmipura	Protected	155.61			
14	Baran	Nahargarh	Ghatti C	Unclassed	341.68			
15	Baran	Nahargarh	Balapura	Protected	3873.16			

16	Baran	Nahargarh	Chhatarganj B	Protected	2610.21
17	Baran	Nahargarh	Jaitpura A	Protected	1561.54
18	Baran	Nahargarh	Nahargarh	Protected	2418.08
19	Baran	Nahargarh	Seemlod	Protected	1223.76
20	Baran	Chhipabarod	Bezadpur A	Protected	4793.59
21	Baran	Kishanganj	Bhanwargarh	Protected	2625.9
22	Baran	Kishanganj	Ummedsagar	Protected	2197.43
23	Baran	Chhabda	Deelod	Protected	2625.84
24	Baran	Nahargarh	Seegri	Protected	3066.39
25	Baran	Chhipabarod	Sarthal B	Protected	1061.69
26	Baran	Chhipabarod	Harnavda Shahji	Protected	5165.21
27	Baran	Kelwada	Telni B	Protected	2200.61
28	Baran	Kelwada	Rajpur A	Protected	1287.2
29	Baran	Kelwada	Telni C	Protected	1619.09
30	Baran	Kelwada	Sitabadi	Protected	6905.85
31	Baran	Nahargarh	Ghatti B	Protected	2026.38
32	Baran	Kishanganj	Nayagaon Ranwasa	Protected	2187.16
33	Baran	Nahargarh	Ahmeda Jamidara	Protected	104.05
34	Baran	Nahargarh	Chhatarganj A	Protected	82.82
35	Baran	Nahargarh	Haripura	Protected	341.13
36	Baran	Nahargarh	Jalwada	Protected	1441.86
37	Baran	Kelwada	Telni A	Protected	244.27
TOTA	73938.61				
Shahbad Conservation Reserve					18939.61
Shahbad Taleti Conservation Reserve					17884.21
Banjh Amli Conservation Reserve					14621.00
Ramgarh Conservation Reserve					3809.00
GRAN	D TOTAL				129192.43

## **Southern Rajasthan Tiger Reserve (potential)**

This area includes Mount Abu Sanctuary, Phulwari ki Nal Sanctuary, Jaisamand Sanctuary and Sitamata Sanctuary and intervening forests of Rajasthan and Gujarat south of the proposed Kumbhalgarh Tiger Reserve as shown on the map.



4.7: Potential Southern Rajasthan Tiger Reserve

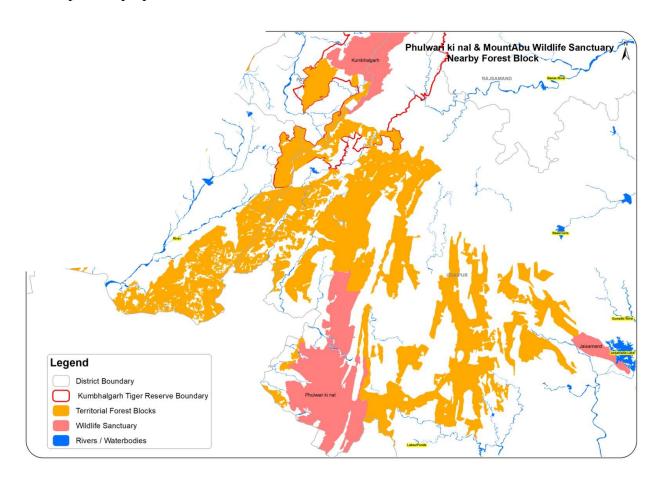
The proposed Kumbhalgarh Tiger Reserve, Phulwari ki Nal Sanctuary and Jaisamand Sanctuary are connected through contiguous forests which can be developed into a tiger reserve as below:

	Table 4.12: Potential Southern Rajasthan Tiger Reserve Part I					
	Forest B	locks that can b	e considered for inclusion i	n Tiger Reserve	!	
S. No.	Division	Range	Block	Legal status	Area (in ha)	
1	Sirohi	Abu Road	Bhainsasingh	Reserved	3113.80	
2	Sirohi	Abu Road	Bhakhar	Reserved	31034.00	
3	Sirohi	Pindwada	Arnua	Protected	10437.70	
4	Sirohi	Pindwada	Arnua II	Unclassed	1717.00	
5	Udaipur	Augana	Aadiwash	Protected	2406.00	
6	Udaipur	Augana	Augana	Protected	1800.38	
7	Udaipur	Augana	Balidiya	Reserved	1313.00	
8	Udaipur	Augana	Gadota	Reserved	2282.82	
9	Udaipur	Augana	Harat Ki Ot	Protected	1261.00	
10	Udaipur	Augana	Oda	Reserved	1511.72	
11	Udaipur	Augana	Raidari	Protected	1083.05	
12	Udaipur	Augana	Ramkunda	Reserved	3897.10	
13	Udaipur	Augana	Salar Uf Aakhsalar Ka	Reserved	2949.72	

14	Udaipur	Augana	Sar Ki Ghati	Protected	1481.05
15	Udaipur	Augana	Suraj Bara	Reserved	2088.03
16	Udaipur	Falasiya	Madadi	Protected	5439.00
17	Udaipur	Falasiya	Nala Uf Chittodia -B	Protected	1288.19
18	Udaipur	Falasiya	Peepal Bara	Protected	3110.00
19	Udaipur	Falasiya	Som Part -Ii	Reserved	4571.00
20	Udaipur	Jhadol	Jhameri	Reserved	1108.00
21	Udaipur	Jhadol	Mohammed Falasia	Reserved	1157.00
22	Udaipur	Jhadol	Naal Sandol	Reserved	1916.00
23	Udaipur	Jhadol	Nainbara	Reserved	6203.81
24	Udaipur	Jhadol	Narayani	Protected	1300.00
25	Udaipur	Jhadol	Sera	Reserved	3846.00
26	Udaipur	Kherwada	Bhakara	Reserved	2024.82
27	Udaipur	Kherwada	Katrwas	Reserved	3157.71
28	Udaipur	Kherwada	Pareda	Reserved	2218.07
29	Udaipur	Kherwada	Peepli -A	Protected	1180.37
30	Udaipur	Kherwada	Saangwada	Reserved	9712.92
31	Udaipur	Kherwada	Suberi	Reserved	1346.00
32	Udaipur	Parsad	Chanawada	Reserved	1541.44
33	Udaipur	Parsad	Jabala -A	Protected	1662.33
34	Udaipur	Parsad	Javar Sigat Wada-B	Protected	1947.57
35	Udaipur	Parsad	Khajuri-A	Protected	3487.31
36	Udaipur	Parsad	Panduna	Protected	2103.52
37	Udaipur	Parsad	Saru -C	Protected	3519.88
38	Udaipur	Sarada	Ajabara	Protected	1170.85
39	Udaipur	Sarada	Dingri	Reserved	4780.06
40	Udaipur	Sarada	Javar Sigat Wada-A	Protected	2023.64
41	Udaipur	Sarada	Maneeol Urf Kali Ghati	Reserved	2897.99
42	Udaipur	Sarada	Palodda	Reserved	1263.00
43	Udaipur	Udaipur West	Alshigarh (Marwar	Reserved	2097.00
44	Udaipur	Udaipur West	Borbal	Reserved	1916.00
45	Udaipur	Udaipur West	Harnia Mai Dagal	Protected	2261.00
46	Udaipur	Udaipur West	Kala Mangra	Protected	1388.00
47	Udaipur	Udaipur West	Samar -A	Protected	2017.00
48	Udaipur	Udaipur West	Undari Poplati	Protected	1245.00
49	Udaipur North	Dewla	Khokharia Ki Naal	Protected	6443.00
50	Udaipur North	Dewla	Merpur	Protected	4566.63
51	Udaipur North	Dewla	Pipal Maal	Reserved	5951.76
52	Udaipur North	Dewla	Torana I	Reserved	7197.55
53	Udaipur North	Gogunda	Bokan	Reserved	1085.00
54	Udaipur North	Gogunda	Dholiya	Reserved	2199.00
55	Udaipur North	Gogunda	Naalmokhi	Reserved	4240.00
56	Udaipur North	Gogunda	Shivadia	Reserved	2942.00
57	Udaipur North	Kotda	Bhuri Dhaber -A	Protected	1236.84
58	Udaipur North	Kotda	Her	Reserved	1711.00

59	Udaipur North	Kotda	Ladan	Reserved	2651.50
60	Udaipur North	Kotda	Subra Subri	Reserved	6231.90
61	Udaipur North	Kotda	Toran Ii	Reserved	5430.40
62	Udaipur North	Kotda	Umariya Part A	Reserved	1395.70
63	Udaipur North	Kukawas	Kangwas	Protected	2255.40
64	Udaipur North	Kukawas	Kayari	Reserved	4930.87
65	Udaipur North	Kukawas	Kukawas	Reserved	3699.50
66	Udaipur North	Kukawas	Samoli	Reserved	2811.38
67	Udaipur North	Kukawas	Teensara	Protected	6657.46
68	Udaipur North	Udaipur	Ambua	Reserved	1165.00
TOTA	TOTAL				
Phulwari ki Nal Sanctuary					51141.00
Jaisamand Sanctuary					5234.00
GRAND TOTAL					286453.74

The map of the proposed area is as under:



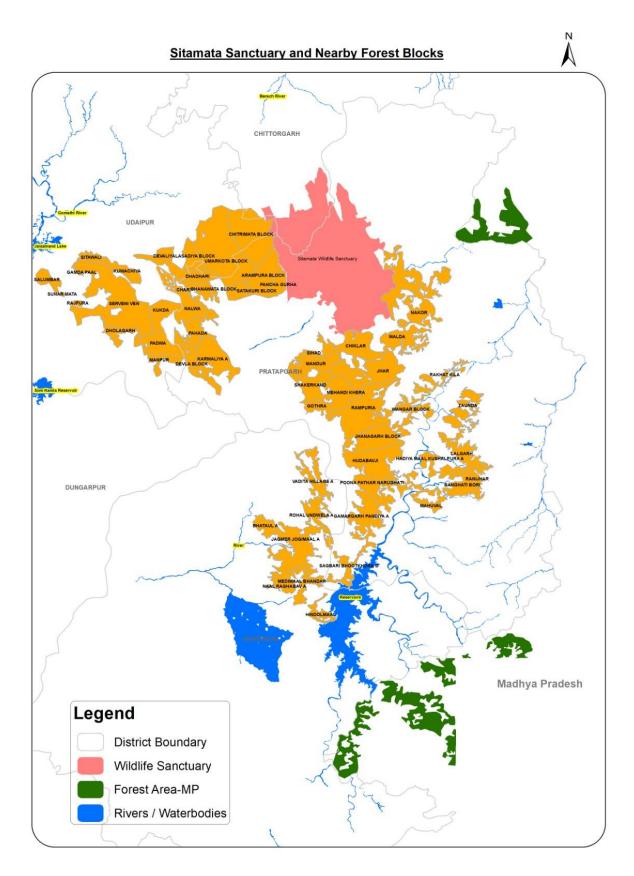
4.8: Potential Southern Rajasthan Tiger Reserve Part I

Sitamata Sanctuary and its adjoining areas are also a candidate for a tiger reserve in future as it also has contiguous forests which include the following forest blocks:

Table 4.13: Potential Southern Rajasthan Tiger Reserve Part II							
	Forest Blocks that can be considered for inclusion in Tiger Reserve						
S. No.	Division	Range	Block	Legal status	Area (in ha)		
1	Banswara	Banswara	Hindolmaal	Protected	1001.46		
2	Banswara	Banswara	Medimaal Bhandar	Protected	1255.05		
3	Banswara	Banswara	Naal Raghabav A	Protected	1179.55		
4	Banswara	Ghatol	Bhataul A	Protected	1084.07		
5	Banswara	Ghatol	Jagmer Jogimaal A	Protected	5744.38		
6	Banswara	Ghatol	Rohal Undwela A	Protected	2057.07		
7	Banswara	Ghatol	Vadita Hillage A	Protected	2038.50		
8	Banswara	Pipal Khunt	Sagbari Bhootkhora D	Protected	1431.06		
9	Pratapgarh	Bansi	Chitrimata Block	Reserved	6473.00		
10	Pratapgarh	Bansi	Devaliya	Protected	1230.00		
11	Pratapgarh	Bansi	Lasadiya Block	Protected	1612.00		
12	Pratapgarh	Bansi	Umarkota Block	Reserved	9698.00		
13	Pratapgarh	Devgarh	Chiklar	Protected	2974.00		
14	Pratapgarh	Devgarh	Jhar	Protected	5299.00		
15	Pratapgarh	Devgarh	Malda	Protected	2840.00		
16	Pratapgarh	Devgarh	Nakor	Protected	3442.00		
17	Pratapgarh	Devgarh	Nalwa	Reserved	3934.00		
18	Pratapgarh	Dhariyawad	Arampura Block	Reserved	3188.00		
19	Pratapgarh	Dhariyawad	Bhanawata Block	Protected	1392.00		
20	Pratapgarh	Dhariyawad	Chari	Protected	1646.00		
21	Pratapgarh	Dhariyawad	Devla Block	Protected	1634.00		
22	Pratapgarh	Dhariyawad	Dhadhari	Protected	2183.00		
23	Pratapgarh	Dhariyawad	Gothra	Reserved	1129.00		
24	Pratapgarh	Dhariyawad	Karmaliya A	Reserved	3747.00		
25	Pratapgarh	Dhariyawad	Mandur	Reserved	2626.00		
26	Pratapgarh	Dhariyawad	Nalwa	Protected	2120.00		
27	Pratapgarh	Dhariyawad	Pahada	Reserved	2167.00		
28	Pratapgarh	Dhariyawad	Pancha Gurha	Reserved	1105.00		
29	Pratapgarh	Dhariyawad	Satakuri Block	Reserved	1138.00		
30	Pratapgarh	Dhariyawad	Shakerkand	Reserved	2425.00		
31	Pratapgarh	Dhariyawad	Sihad	Protected	1318.00		
32	Pratapgarh	Peepalkhunt	Banghati Bori	Protected	1857.72		
33	Pratapgarh	Peepalkhunt	Gamargarh Pandiya A	Protected	3303.24		
34	Pratapgarh	Peepalkhunt	Hadiya Maal Kushalpura A	Protected	1506.51		
35	Pratapgarh	Peepalkhunt	Hudabavji	Protected	4135.72		
36	Pratapgarh	Peepalkhunt	Mahuval	Protected	1164.66		

37	Pratapgarh	Peepalkhunt	Poona Pathar Narughati	Protected	3582.66
38	Pratapgarh	Peepalkhunt	Sagbari Bhootkhora D	Protected	1431.06
39	Pratapgarh	Pratapgarh	Jhanagarh Block	Protected	4210.00
40	Pratapgarh	Pratapgarh	Lalgarh	Protected	2931.00
41	Pratapgarh	Pratapgarh	Mehandi Khera	Protected	2898.00
42	Pratapgarh	Pratapgarh	Rakhat Kila	Protected	1085.00
43	Pratapgarh	Pratapgarh	Rampuria	Protected	6993.00
44	Pratapgarh	Pratapgarh	Ranijhar	Protected	1041.00
45	Pratapgarh	Pratapgarh	Wangar Block	Protected	1899.93
46	Pratapgarh	Pratapgarh	Zaunda	Protected	1515.00
47	Udaipur	Salumbar	Dholagarh	Protected	1275.48
48	Udaipur	Salumbar	Gamda Paal	Unclassed	232.77
49	Udaipur	Salumbar	Kukda	Reserved	2095.69
50	Udaipur	Salumbar	Kuwachiya	Reserved	1204.60
51	Udaipur	Salumbar	Manpur	Protected	1150.06
52	Udaipur	Salumbar	Padwa	Reserved	2427.35
53	Udaipur	Salumbar	Rajpura	Protected	176.00
54	Udaipur	Salumbar	Salumbar	Reserved	1056.31
55	Udaipur	Salumbar	Serveni Ven	Reserved	10231.78
56	Udaipur	Salumbar	Sitawali	Reserved	675.82
57	Udaipur	Salumbar	Sunar Mata	Protected	54.00
TOTAL					141245.50
Sitamata Sanctuary					42294.00
GRAND TOTAL					183539.50

The map of this area is as under:



4.9: Potential Southern Rajasthan Tiger Reserve Part II

#### **CRITICAL CORRIDOR ELEMENTS (CCE)**

There are three significant chunks of contiguous forests and Protected Areas in Rajasthan which are critical to successful establishment of migration corridors in addition to the National Gharial Sanctuary which is a critical corridor for eastern Rajasthan. The following areas are to be developed as 'stepping stone' habitats which will house transient population of tigers to connect various potential and current tiger habitats of Rajasthan:

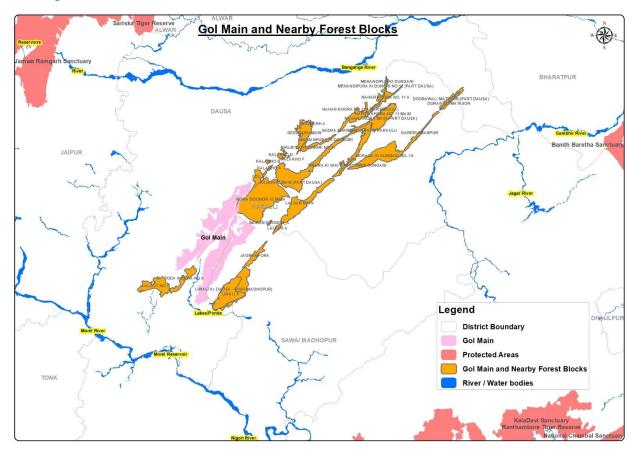
#### 1. Gol Forests or Gol CCE

This significant chunk of forest lies at the junction of Karauli, Dausa and Sawaimadhopur districts which is almost midway between Sariska and Ranthambhore tiger landscapes and is significant as a 'stepping stone' in the creation of corridor between them. The forest blocks forming part of this chunk are as under:

	Table 4.14: Critical Corridor Element I – Gol Forests					
S.No.	Division	Block	Legal status	Area (in ha)		
1	Dausa	Gol Main (Part Dausa)	Protected	9564.64		
2	Dausa	Lalsot No 7	Reserved	1379.29		
3	Dausa	Liwali 9 (Part Dausa)	Reserved	693.64		
4	Dausa	Toda Indawa No 8	Reserved	769.45		
5	Dausa	Bhujet Ki Doongri No 21	Reserved	300.58		
6	Dausa	Geejgarh A	Protected	20.99		
7	Dausa	Geejgarh Main	Protected	1112.77		
8	Dausa	Gol A	Protected	521.02		
9	Dausa	Gol B	Protected	296.74		
10	Dausa	Gol C	Protected	5.76		
11	Dausa	Gudha Chandra Ji (Part Dausa)	Protected	68.21		
12	Dausa	Gumanpura Ki Doongri	Protected	153.93		
13	Dausa	Kalakho A	Protected	46.12		
14	Dausa	Kalakho B	Protected	63.59		
15	Dausa	Kalakho C	Protected	6.37		
16	Dausa	Kalakho D	Protected	200.47		
17	Dausa	Kalakho E	Protected	5.73		
18	Dausa	Kalakho F	Protected	11.28		
19	Dausa	Nahar Khora Main (Part Dausa)	Reserved	356.27		

20	Dausa	Nahar Khora No 11A (Part Dausa)	Reserved	1241.78
21	Dausa, Karauli	Kalakho Main (Part Dausa)	Protected	1376.78
22	Karauli	Gol B	Protected	220.83
23	Karauli	Gudha Chandra Ji (Part Karauli)	Protected	1308.57
24	Karauli	Lalsar A	Protected	139.19
25	Karauli	Lalsar Main	Protected	2453.50
26	Karauli	Mordungar 10 Main	Reserved	1340.21
27	Karauli	Morada Ki Dungari No15	Reserved	2505.58
28	Karauli	Moran Doongr_A	Reserved	40.49
29	Karauli	Nahar Khora No. 11 A	Reserved	423.02
30	Karauli	Nahar Khora No. 11 Main	Reserved	1147.97
31	Karauli	Timawa Ki Ghati Paschmi Dungri	Protected	151.66
32	Karauli	Kalakho Main (Part Karauli)	Protected	1897.33
33	Sawai Madhopur	Gol Main (Part Sawai Madhopur)	Reserved	3598.41
34	Sawai Madhopur	Jagrampura	Protected	512.92
35	Sawai Madhopur	Liwali 9	Reserved	2166.60
36	Sawai Madhopur	Liwali 9	Unclassed	480.00
37	Sawai Madhopur	Mordungar No 10	Unclassed	408.87
TOTA	L		·	36990.56

The map of the element is as under:



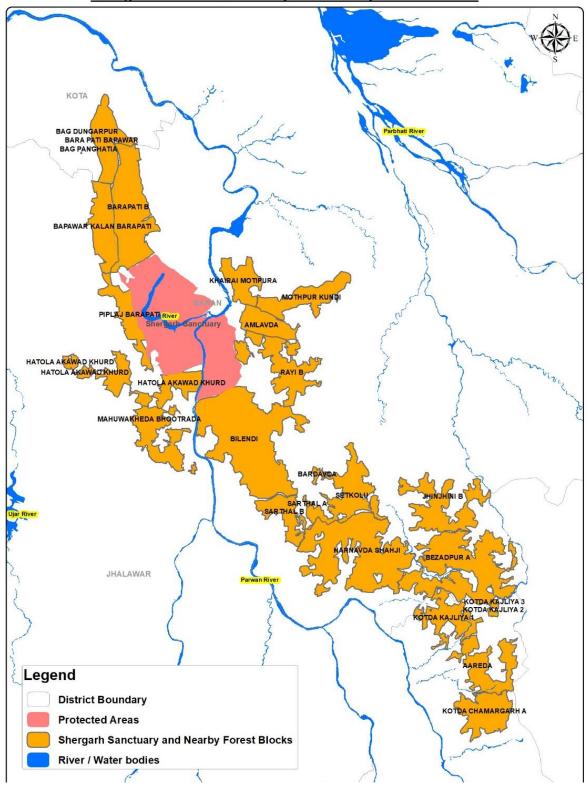
#### 2. Shergarh Forests or Shergarh CCE

This contiguous forest complex around Shergarh Sanctuary is a critical element in the creation of corridor between Mukundara Hills Tiger Reserve and Madhya Pradesh forests as well as between Mukundara Hills Tiger Reserve and potential Baran Tiger Reserve. The forest blocks included in this element are as under:

Table 4.15: Critical Corridor Element II – Shergarh Forests							
Shergarh Wildlife Sanctuary and nearby Forest Blocks							
S.No.	Division	Block	Legal status	Area (in ha)			
1	Baran	Khairai Motipura	Protected	1085.75			
2	Baran	Mothpur Kundi	Protected	1496.87			
3	Baran	Bardavda	Protected	121.57			
5	Baran	Bilendi	Protected	7294.82			
6	Baran	Harnavda Shahji	Protected	5165.21			
8	Baran	Rayi B	Protected	2422.19			
9	Baran	Sarthal A	Protected	58.89			
10	Baran	Sarthal B	Protected	1061.69			
11	Baran	Setkolu	Protected	2615.31			
26	Kota	Bara Pati Bapawar	Protected	1806.89			
14	Jhalawar	Bapawar Kalan Barapati	Protected	3719.65			
24	Jhalawar	Bhootrada	Protected	434.10			
15	Jhalawar	Hatola Akawad Khurd	Protected	2433.50			
16	Jhalawar	Mahuwakheda Bhootrada	Protected	2143.34			
17	Jhalawar	Piplaj Barapati	Protected	1455.56			
23	Baran	Amlavda	Protected	1143.73			
13	Baran	Barapati B	Protected	4535.69			
TOTA	38994.76						
Sherga	8167.00						
GRAN	47161.76						

The map of this element is as under:

## **Shergarh Wildlife Sanctuary and Nearby Forest Blocks**



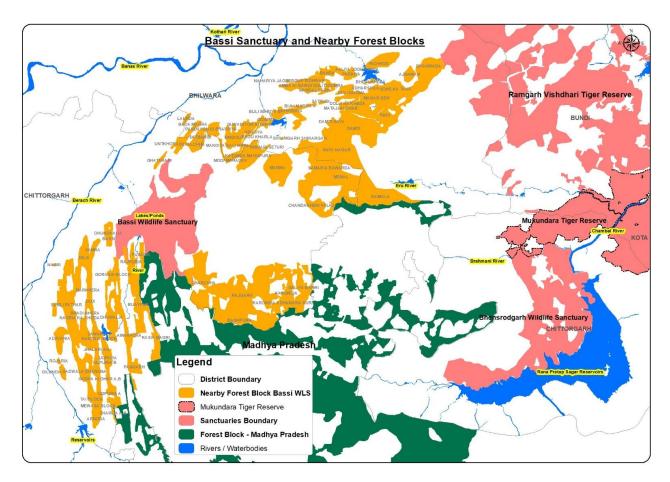
#### 3. Bassi Forests or Bassi CCE

This contiguous forest complex around Bassi Sanctuary is a critical element in the creation of corridor between Mukundara Hills Tiger Reserve and potential tiger habitats in southern Rajasthan. The forest blocks included in this element are as under:

Table 4.16: Critical Corridor Element III – Bassi Forests								
Bassi Sanctuary and nearby Forest Blocks								
S.No.	Division	Block	Legal status	Area (in ha)				
1	Chittorgarh	Fusaria	Reserved	311.00				
2	Chittorgarh	Shakbor	Reserved	1351.00				
3	Chittorgarh	Rasia Magri	Protected	877.00				
4	Chittorgarh	Dhuwalia	Reserved	1046.00				
5	Chittorgarh	Amarpura	Reserved	515.00				
6	Chittorgarh	Bijaypur	Reserved	1394.00				
7	Chittorgarh	Palcha Block	Reserved	828.00				
8	Chittorgarh	Rajpuria	Reserved	756.00				
9	Chittorgarh	Gorasia Block	Reserved	1270.00				
10	Chittorgarh	Pangarh	Reserved	668.00				
11	Chittorgarh	Udpuria B	Protected	82.00				
12	Chittorgarh	Adavania	Reserved	668.00				
13	Chittorgarh	Gilundia	Reserved	223.00				
14	Chittorgarh	Lawaria	Reserved	400.00				
15	Chittorgarh	Kila Block	Reserved	621.00				
16	Chittorgarh	Jhalarvan	Reserved	208.00				
17	Chittorgarh	Gudha Ki Dhar A,B	Protected	167.00				
18	Chittorgarh	Gadwala Dharana	Reserved	1830.00				
19	Chittorgarh	Dhundhalia	Reserved	489.00				
20	Chittorgarh	Bhadi Khera A	Unclassed	3.12				
21	Chittorgarh	Sadi	Protected	281.00				
22	Chittorgarh	Rojaria	Reserved	49.00				
23	Chittorgarh	Nilia	Protected	942.00				
24	Chittorgarh	Nagria Ka Choda	Reserved	128.00				
25	Chittorgarh	Bhadi Khera	Reserved	80.00				
26	Chittorgarh	Bhanda Khalsa	Protected	656.00				
27	Chittorgarh	Mallah Block	Protected	415.00				
28	Chittorgarh	Tai Block	Protected	313.00				
29	Chittorgarh	Arnoda	Reserved	315.00				
30	Chittorgarh	Mewasa Block	Protected	292.00				
31	Chittorgarh	Charlia A,B	Reserved	110.00				

TOTAL	17288.12
Bassi Sanctuary	13869.00
GRAND TOTAL	31157.12

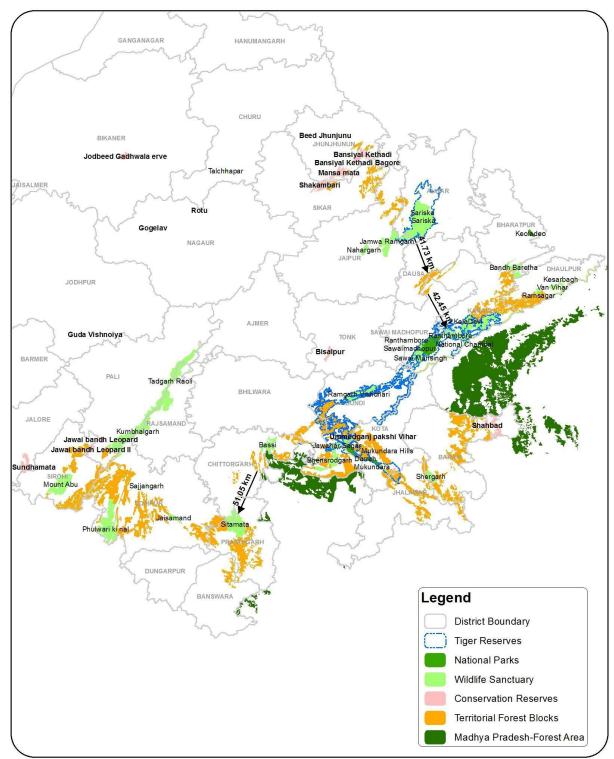
The map of this element is as under:



Based on the above discussions the map of potential and current tiger habitats in the State of Rajasthan is as under:

# Long Term Action Plan Identification of Potential Areas





Map-6: Potential Areas for development of potential tiger habitats in Rajasthan

#### **CHAPTER 5**

## MANAGEMENT OF WILDLIFE CORRIDORS

The potential tiger habitats listed in Chapter 4 need to be connected through corridors within forests and beyond to ensure genetic diversity and a viable meta-population of tigers. The bigger challenge exists in areas where no forest continuity exists and control of such areas is not with the Forest Department. There are several possibilities for exercising some control of such areas in order to facilitate their utilization as tiger corridors as under:

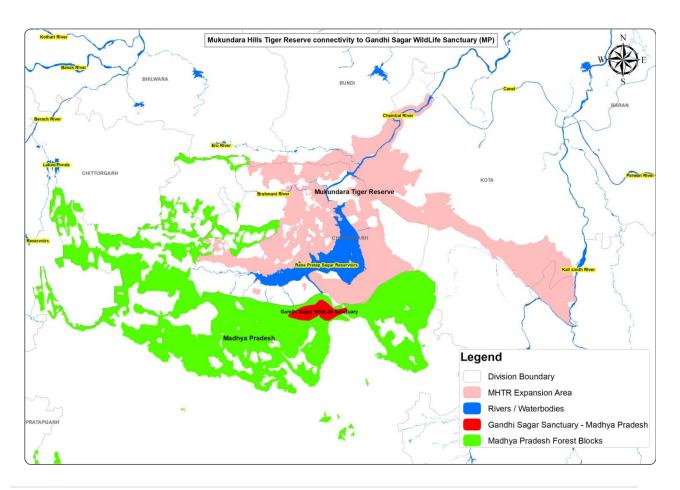
- a. Declaration as Conservation Reserve (if the areas is government land).
- b. Declaration as Community Reserve with the consent of private landholders and panchayats (for panchayat lands)
- c. Use of other legislation for controlling activities and promoting conservation oriented land use

Tigers living in semi-arid conditions of Rajasthan are known to prefer residing in mesic sites and migrating along drainage lines. Example of this theory is the landscape along the mighty Chambal river which has tiger movement along the whole stretch of the river in Rajasthan from Dhaulpur to Kota. This premise has been utilized to identify tiger corridors for development in areas where contiguous forest habitats are not available. It may further be pointed out that tigers are able to migrate through agricultural fields when the crop is tall especially after monsoon and in winter.

The corridors between different existing and potential tiger habitats have been identified through GIS analysis of forest areas, drainage lines and other features. In 2011, a proposal for declaration of a Biosphere Reserve along the Chambal river was prepared by a committee consisiting of Mr Arindam Tomar IFS, Mr Anoop K R IFS and Mr Randeep Singh Researcher Wildlife Institute of India, wherin 14 corridors were identified in the Chambal landscape. With almost the whole landscape along the Chambal river now covered or proposed to be covered under Tiger Reserves except the Sultanpur forests, all these corridors are now taken care of. Beyond these corridors, attempts were undertaken for connecting the following major chunks of forest and Protected Areas through corridors:

## Different Tiger Reserves and potential tiger habitats of Rajasthan to forests in Madhya Pradesh and Gujarat state

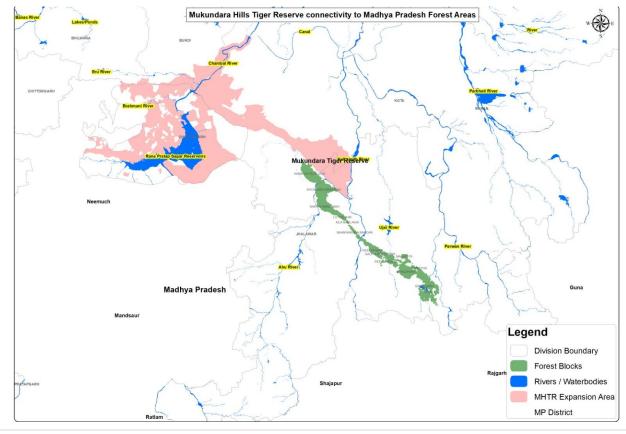
The Chambal river forms the boundary between Rajasthan and Madhya Pradesh for a major portion of its length and connects forests on both sides of the river. Dhaulpur Karauli Tiger Reserve, Ranthambhore Tiger Reserve and Ramgarh Vishdhari Tiger Reserve lie on the western bank of Chambal river while Madhya Pradesh forests of Morena and Sheopur districts, most of which are potential tiger habitats, lie on its eastern bank with numerous drainage lines (Kuno, Kalisindh, Parvati, Parwan, etc) functioning as corridors or potential corridors. However, further south the Chambal river flows in Rajasthan only. The forests of Baran, Kota and Jhalawar connect to forests of Sheopur, Shivpuri, Guna, Rajgarh, Agar Malwa and Mandsaur through numerous drainage lines and contiguous forests. Here Mukundara Hills Tiger Reserve connects to Gandhisagar Sanctuary through the forests included in its proposed extension and across the Rana Pratap Sagar dam on Chambal river.



Mukundara Hills Tiger Reserve forests also connect to forests of Madhya Pradesh in Guna and Shivpuri districts through an almost 70 km corridor involving Ahu, Kalisindh, Ujar and Parwan rivers connecting Lotiya Jhir to Kila Naulakhi to Bhanwarasa Bagdar involving Jhalrapatan revenue areas. The forest areas involved are as under:

S. No.	Division	Block	Legal Status	Area (in ha)
1	Jhalawar	Aametha	Protected	1108.27
2	Jhalawar	Nesh A	Protected	2859.04
3	Jhalawar	Gadiya Reechhwa	Protected	1329.36
4	Jhalawar	Malatota	Protected	871.18
5	Jhalawar	Bairagarh	Protected	2001.76
6	Jhalawar	Reechhwa A	Protected	1556.5
7	Jhalawar	Reechhwa B	Protected	422.24
8	Jhalawar	Surajpura	Protected	3581.34
9	Jhalawar	Bhanwarasa Bagdar	Reserved	661.79
10	Jhalawar	Khokanda Dhanwas	Reserved	3240.80
11	Jhalawar	Kila Naulakhi	Reserved	153.87
12	Jhalawar	Lotiya Jhir	Reserved	578.70
13	Jhalawar	Raipur Baalgarh	Reserved	2633.80
14	Kota	Khimach A Block	Protected	3491.67

The map is shown below:



Further south, there are no Tiger Reserves but potential tiger habitats in southern Rajasthan in Chittorgarh, Pratapgarh and Banswara connect to forests in Mandsaur, Ratlam, Neemuch and Jhabua districts of Madhya Pradesh. To the west, the forests of Banswada, Dungarpur, Udaipur and Sirohi connect to Dang forests in Gujarat falling in the districts of Banaskantha, Sabarkantha, Aravali, Mahisagar and Dahod.

### ii. Dhaulpur forest areas to Ranthambhore Tiger Reserve

Dhaulpur forest areas are currently home to breeding tigers dispersing from Ranthambhore Tiger Reserve. The Chambal river acts as a natural corridor and the proposed Dhaulpur Karauli Tiger Reserve ensures forest connectivity from the Karauli part of Ranthambhore Tiger Reserve. The development of Dhaulpur Karauli Tiger Reserve will ensure development of the corridors and hence no separate effort is required for development of corridors in this segment.

### iii. Ranthambhore Tiger Reserve to Karauli forests

The Sawaimadhopur and Karauli portions of Ranthambhore Tiger Reserve are separated by the Banas river. The corridor is functional and there is regular dispersal of tigers to Karauli and thence to Dhaulpur resulting in tiger breeding in Karauli and Dhaulpur. Village relocation has been undertaken in this area to strengthen the already working corridor in this area. Additionally, the National Gharial Sanctuary portion along Ranthambhore Tiger Reserve is proposed to be included in the Tiger Reserve thus securing another corridor between the Tiger Reserve via Kanduli river and Chambal river. The expanded Bandh Baretha Sanctuary also connects to these forests extending the potential tiger habitat into the district of Bharatpur.

### iv. Ranthambhore Tiger Reserve to Ramgarh Vishdhari Tiger Reserve

The corridors between the two Tiger Reserves around Indergarh have been secured by their inclusion in Ramgarh Vishdhari Tiger Reserve. The corridors are functional and male tiger RBT115 is currently staying in Ramgarh Vishdhari Tiger Reserve after dispersing from

Ranthambhore. Earlier RBT91 had dispersed from Ranthambhore to Ramgarh Vishdhari Sanctuary which was later shifted to Mukundara Hills Tiger Reserve. Mitigation measures on linear infrastructure, development of habitat and development of water resources are being undertaken to further improve this corridor.

### v. Ramgarh Vishdhari Tiger Reserve to Mukundara Hills Tiger Reserve

Most of the forest areas between Kota and Bundi have been included in the buffer of Ramgarh Vishdhari Tiger Reserve and thus the two tiger reserves are virtually connected through mining areas as also forest areas around Dabi. As mining is stopped during the rainy season, this area can be a functional seasonal corridor. As the buffer area improves, the corridor will become more functional. Bhimlat area has been taken up on a priority to create a tiger habitat as a stepping stone between Ramgarh Vishdhari core and Mukundara Hills Tiger Reserve area.

## vi. Ranthambhore Tiger Reserve to Mukundara Hills Tiger Reserve

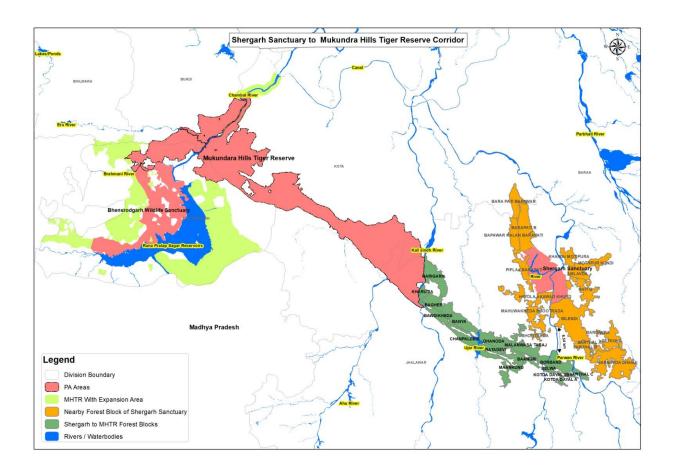
A tiger RBT98 dispersed from Ranthambhore to Mukundara Hills Tiger Reserve by following Chambal and Kali Sindh rivers in January February 2019 indicating that there is a functional corridor between the two tiger reserves. The famous Sultanpur tigress also dispersed along the Chambal to become resident in Sultanpur forests for several years. The Chambal river part of this corridor is now part of the Ramgarh Vishdhari Tiger Reserve Core. Further strengthening of this corridor will be possible as the core becomes more intensely managed.

## vii. Mukundara Hills Tiger Reserve to forests of Baran district

This area has two corridor components namely Mukundara Hills Tiger Reserve to Shergarh CCE and from Shergarh CCE to potential Baran Tiger Reserve.

## a. Mukundara Hills Tiger Reserve to Shergarh CCE

A potential corridor between Mukundara Hills Tiger Reserve and Shergarh CCE has been identified as shown in the map below.



The length of the corridor is almost 51 km most of which is in contiguous forests from Darrah end of Mukundara Hills Tiger Reserve to Parwan river in Borband forest block and thence along the Parwan river for 14 km to reach Shergarh CCE. The revenue villages along the Parwan river include Mokhampura, Peepalya Ghata, Maloni, Bilendi, Sukhneri and Amlawada Kharan. The contiguous forests of the corridor are as under:

S.No.	Division	Block	Legal status	Area (in ha)
1	Baran	Sarthal C	Protected	538.73
2	Jhalawar	Belwa	Protected	704.25
3	Jhalawar	Kotda Dayal 2b	Unclassed	10.07
4	Jhalawar	Kotda Dayal A	Protected	535.62
5	Jhalawar	Ratadevi	Protected	1777.90
6	Jhalawar	Bawdikheda	Protected	977.78
7	Jhalawar	Banya	Protected	1854.49
8	Jhalawar	Dhanoda	Protected	2327.13
9	Jhalawar	Kharutia	Reserved	572.00
10	Jhalawar	Bagher	Protected	3862.34

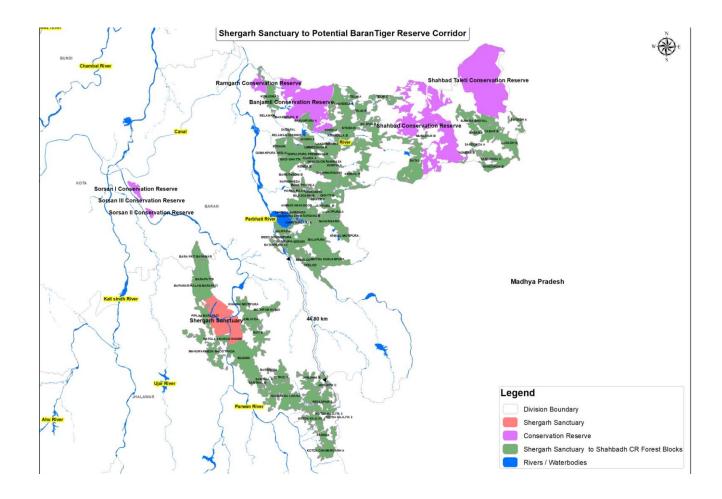
11	Jhalawar	Baandri	Protected	1203.78
12	Jhalawar	Borband	Protected	2622.46
13	Jhalawar	Harigarh	Protected	3069.56
14	Jhalawar	Chanpaldevi	Protected	2268.00
15	Jhalawar	Maankund	Protected	3196.21
16	Jhalawar	Malanwasa Taraj	Protected	2436.27

## b. Shergarh CCE to potential Baran Tiger Reserve

The second corridor from Shergarh CCE to the potential Baran Tiger Reserve has a length of almost 44.80 km of which almost 39.35 km is along Parvati River between Jhijhini C and Deelod forest blocks.

S.	Forests betw	een which there is gap	Distance	Davanua villagas in batwaan
No.	From	То	Distance	Revenue villages in between
1	Jhinjhini C	Deelod (Via Parbhati River)	41.80 km	Anandpura, Neemoda, Kari Kheri, Kherli Gaddiyan, Kawai, Umar Thana, Reenjha, Ghaghonia, Guru Kheri, Kohni, Ganeshpura, Bambori Ghata, Wazeerpura, Kundi, Patna, Moondakya, Sankha Jageer, Moonda Ghata, Dabari, Kotri

From Deelod forest block onwards there is continuous forest of potential Baran Tiger Reserve including Shahbad and Shahbad Taleti Conservation Reserves as well as Banjh Amli and Ramgarh (crater) Conservation Reserves as shown on the map.

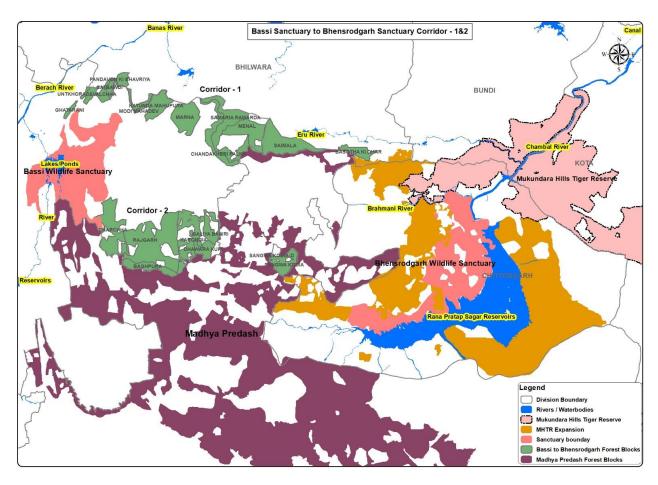


## viii. Mukundara Hills Tiger Reserve to forests of Southern Rajasthan

The corridor from Bhensrodgarh Sanctuary to Bassi Sanctuary is the primary gateway to the forests of Mewar region. From Bassi sanctuary, corridors can be developed to the proposed Kumbhalgarh Tiger Reserve and to Sitamata Sanctuary. Other Protected Areas of southern Rajasthan can be reached through contiguous forests from proposed Kumbhalgarh Tiger Reserve as well as Sitamata Sanctuary via Jaisamand Sanctuary.

## a. Bhensrodgarh Sanctuary to Bassi CCE

Thus the most significant corridor is between Bhensrodgarh Sanctuary (which is included as part of Mukundara Hills Tiger Reserve extension) to Bassi CCE. There are two options identified for this corridor as shown in the map:



The length of Corridor I is almost 53.56 km involving Eru river. The gaps between various forest blocks are as under:

S. No.	Forests between w	hich there is gap	Distance	Revenue villages in
S. NO.	From	То	Distance	between
1	Bassi Sanctuary	Ghatarani	0.44 km	Hamepur
2	Ghatarani	Untkhora	0.86 km	Barniyas
3	Pandavon Ki Bhavriya	Modi Mahadev	0.40 km	Baroondni
4	Katunda Mahupura	Marna	1.05 km	Amartiya, Nathooram Ji
-	Katunua Manupura	Iviaina	1.03 KIII	Ka Khera
5	Marna	Chandakheri Palka	0.87 km	Gorlan, Naya Gaon
3	Waina	Chandakhen i aika	0.67 KIII	Chauhanon Ka
6	Saimala	Basotha Ki Dhar	2.49 km	Tilaswan, Suthiyal and
	Saiiiiaia	Dasoula Ki Dilai	2.49 KIII	MP Forests

The forest blocks included in this corridor are as under:

S. No.	Division	Block	Legal Status	Area (in ha)
1	Bhilwara	Basotha Ki Dhar	Protected	813.00
2	Bhilwara	Modi Mahadev	Reserved	384.91
3	Bhilwara	Pandavon Ki Bhavriya	Protected	515.00
4	Bhilwara	Saimala	Reserved	2851.41

5	Bhilwara	Satbawdi	Reserved	290.30
6	Chittorgarh	Chandakheri Palka	Protected	1307.00
7	Chittorgarh	Devalchha	Protected	798.90
8	Chittorgarh	Ghatarani	Protected	182.00
9	Chittorgarh	Katunda Mahupura	Protected	1432.00
10	Chittorgarh	Marna	Protected	1970.00
11	Chittorgarh	Menal	Protected	2030.00
12	Chittorgarh	Samaria Rawarda	Protected	2650.00
13	Chittorgarh	Untkhora	Reserved	93.00

The length of Corridor II is almost 30.28 km involving Chambal river and forests of Madhya Pradesh. The forest blocks of Rajasthan included are as under:

S. No.	Division	Block	Legal Status	Area (in ha)
1	Chittorgarh	Dhawara Kuri	Reserved	761.00
2	Chittorgarh	Galiya Bawri	Protected	953.00
3	Chittorgarh	Sangwa Kodia	Protected	1128.00
4	Chittorgarh	Charchha	Protected	2957.00
5	Chittorgarh	Baghpura	Reserved	1147.00
6	Chittorgarh	Rajgarh	Protected	5791.00
7	Chittorgarh	Karondia	Protected	2408.00
8	Chittorgarh	Sangwa Kodia-A	Protected	11.18
9	Chittorgarh	Sangwa Kodia-D	Protected	27.00

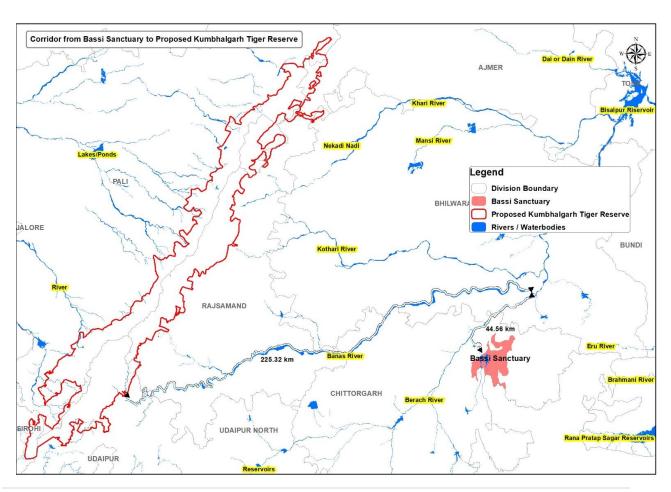
## b. Bassi CCE to proposed Kumbhalgarh Tiger Reserve

The only possibility of a corridor is along the Banas and Berach rivers and their tributaries. The revival and management of these rivers is necessary for creation of this corridor. The details of the revenue area involved are as under:

S.	Forests between	which there is gap	Distance	Revenue villages in between
No.	From	То	Distance	Revenue vinages in between
1	Kumbhalgarh Tiger Reserve	Along Banas River	225.32 km	Akola, Kherpura @ Meghpura, Shree Pura, Mandpiya, Mali Khera, Karer, Hansiyas, Amartiya, Salariya, Kumhariya, Solankiyon Ka Khera, Patliyas, Guwardi, Gega Ka Khera, Dantajati, Ren, Kacholiya, Adsipura, Chandgarh, Bhakliya, Patniya, Downi, Khatwara, Kalyanpura, Gendliya, Biliya Kalan, Mangrop, Peepli, Khaira Bad, Jeewakhera, Siyar, Swaroopganj, Jhopariya, Barantiya, het Hazariya, udiya, Kanpura, Jawasiya, Kanya Kheri, Mohanpura, Gonwaliya, Tagariya, Meda Kheri, Sihana, Ratan Kheri, Pahoona Lalpura, Sankhli, Majhawas, Somi, Bakhatawar Pura, Gogathala, Arni, Keeron Ka Khera, Jeetawas, Gangas, Barliya, Rashmi, Chokri, Sakarawas,

				Peepli Acharyan, Bethumbi, Bamniya Kalan, Bhoorwara, Jawasya, Mohi, Nandoli, Bhat Khera, Nogawan, Kesarpura, Kumariya Khera, Nandora, Khedana, Rakamgarh, Dhanyla, Baman Hera, Bara Bhanuja, Ulpura Nadwala, Rachhoti, Badlawala, Kala Khari Yangan Kari Bagal Kananhali Kalan
				Kala Kheri Veeran, Karai, Bagol, Kooncholi, Kalan Kheri Khara, Molela, Kalan Kheri Patiya, Machind, Parawal, Khokha Dhani, Kheri, Sema, Malida, Dhanwara, Parmaron Ka Bhagal, Barwara, Sadra, Charnon Ki Madar, Karda, Guman, Dhoondhi, Khakhron Ka Gurha, Paner, Teerol
2	Along Berach River	Bassi Sanctuary	44.56 km	Khatwara, Barliyas, Suras, Kharon Ka Khera, Mahtaji Ka Khera, Singhpura, Bilod, Kara Kara, Bara Khera, Saran, Mankari, Leerdi, Chawandiya, Muriliya, Dhantol, Akoriya, Dholi, Lohariya, Sokya, Sahara, Siyaliya

The potential corridor is almost 269.89 km and quite difficult to implement as shown in the map below



# c. Bassi CCE to Sitamata Sanctuary

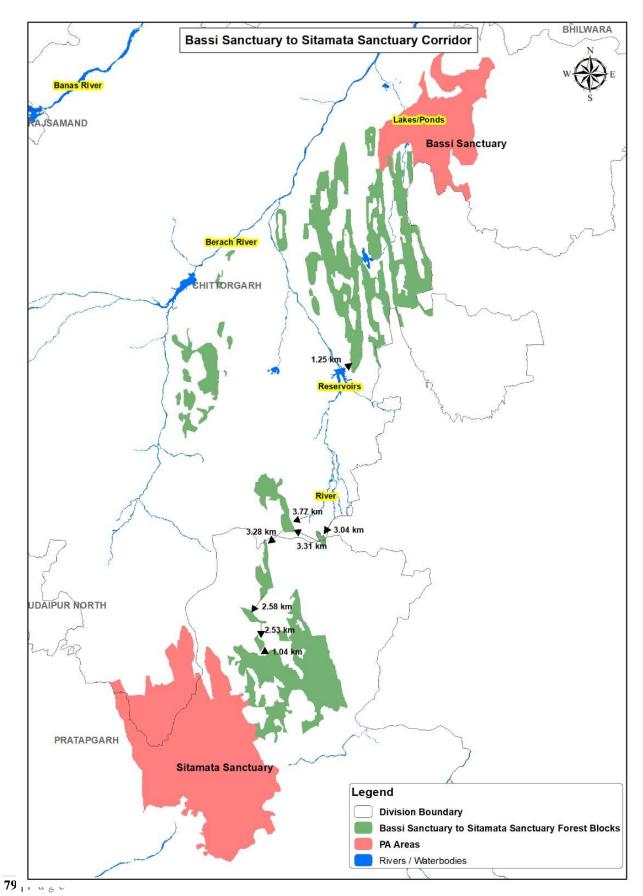
The length of this corridor is about 78 km with Berach river and its tributaries helping in the creation of this corridor. The gaps between various forest blocks are as under

S. No.	Forests between	which there is gap	Distance	Revenue villages in between	
S. NO.	From	То	Distance	Revenue vinages in between	
1	Arnoda	River	1.25 km	Pemandiya Khera, Phootwal	
2	River	Bari	3.77 km	Kadmali, Ghatera	
3	River	Motatok Karunda	3.04 km	Marjeevi	
4	Motatok Karunda	Bari	3.31 km	Malakpura, Marjeevi	
5	Bari	Santokpuria	3.28 km	Bari,Gajpura	
6	Santokpuria	Janjal	2.58 km	Santok Puriya, Lalpura	
7	Janjal	Gotveli	2.53 km	Lakhiyon Ka Khera, Udpura Khurd, Rooppura	
8	Gotveli	Lamba Sagda	1.04 km	Kanwar Choki, Akhepur	

The forest blocks included in this corridor are as under:

S. No.	Division	Block	Legal Status	Area (in ha)
1	Chittorgarh	Bari	Protected	616.00
2	Pratapgarh	Santokpuria	Reserved	701.00
3	Pratapgarh	Gotveli	Reserved	165.00
4	Pratapgarh	Janjal	Protected	268.00
5	Pratapgarh	Motatok Karunda	Protected	137.00

The map of the corridor is as under



## ix. Ramgarh Vishdhari Tiger Reserve to proposed Kumbhalgarh Tiger Reserve

The corridor between the two tiger reserves can be developed at their nearest point in Bhilwara district along Banas (193.52 km) and Kothari river (175.70 km) to forests adjoining Ramgarh Vishdhari Tiger Reserve. The details of the corridor along Kothari river are as under:

	Forests between which there is gap		Revenue Villages in Between
From	То		
Kumbhalgarh Tiger Reserve (Proposed)	Along Kothari River	159.76 km	Bhilwara, Bagoliya, Chawandiya, Delas, Kherimata, Bari, Patiyon Ka Khera, Sora Ka Khera, Kalal Kheri, Bhatewar, Panotiya, Jorawarpura, Jeepiya, Kaloo Khera, Sarewari, Dhool Khera, Bagor, Amarpura, Nabariya, Banjariya, Tanka, Jogras, Suras, Gurha, Baniya, Nandrai, Ban Ka Khera, Sawaipur, Jityas, Beeliya, Dhelana, Nohara, Kali Randiya, Bordiyas, Bhawani Singh Ka Khera, Bor Khera, Ganeshpura, Ralayata, Manpura, Gaphesara, Mukan Garh, Shopura (Gega Ka Khera), Soniyana, Mahuwa, Rooptalai, Ajeetpura Khera, Beeyana, Teekad, Jodhras, Manakdeh, Arsipura, Peethas, Pabrana, Jawarji Ka Khera, Kameri, Baolas, Malaji Ka Gurha, Suwana, Agarpura, Eras, Amargarh, Shivnathpura, Samrath Pura, Dhoomras, Lasadiya, Pondras, Doolehpura, Kawaliyas Mafi, Rewara, Chawandiya
Kothari River	Richhod Forest Block	15.94 km	Soniyana, Ganeshpura, Manpura, Mukan Garh, Mahuwa, Rooptalai, Jalam Ki Jhonpariyan

The details of the corridor along Banas river are as under:

S. No.	Forests between which there is gap		Distance	Revenue villages in between	
S. NO.	From	То	Distance	Revenue vinages in between	
1	Kumbhalgarh Tiger Reserve (Proposed)	Along Banas River	187.16 km	Shree Pura, Solankiyon Ka Khera, Guwardi, Gega Ka Khera, Dhangras, Ren, Adsipura, Chandgarh, Bhakliya, Bharliya, Khatwara, Kalyanpura, Gendliya, Biliya Kalan, Mangrop, Peepli, Kalundiya, Siyar, Darri, Swaroopganj, Jhopariya, Jawasiya, Kanya Kheri, Bardod, Sagat Puriya, Meda Kheri, Sihana, Ratan Kheri,	

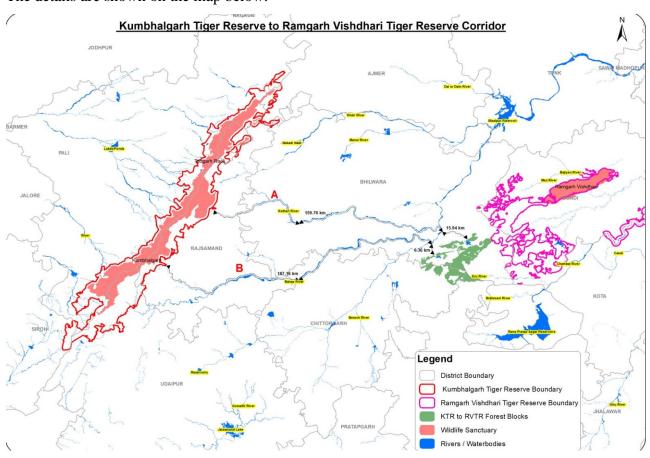
				Lalpura, Kuraj, Sankhli, Majhawas, Somi, Morcha, Peepali Aheeran, Kaleenjar, Saya Ka Khera, Gopalpura Khurd, Gogathala, Bargula, Arni, Jeetawas, Prempura, Gangas, Barliya, Rashmi, Chokri, Peepli Acharyan, Madrechon Ka Gurha, Bethumbi, Bamniya Kalan, Keetawaton Ki Bhagal, Bhoorwara, Jawasya, Gegpura, Mohi, Cheekalwas, Pharara, Nandoli, Bhat Khera, Kunthwa, Nogawan, Atatiya, Kesarpura, Maja, Bararda, Khedana, Baman Hera, Shyampura, Sharah Magri, Dewana, Bansra, Dudhpura
2	Banas River	Guwadiyon ki dhar Forest Block	6.39 km	Jojwa, Mandi Nathan, Sarana

## The forest blocks involved are as under:

S. No.	Division	Block	Legal Status	Area (in ha)
1	Bhilwara	Aaliya Jodhpuriya	Protected	416.00
2	Bhilwara	Adharshila	Reserved	304.00
3	Bhilwara	Ajnawar	Reserved	417.00
4	Bhilwara	Amba Ki Bawdi	Protected	293.00
5	Bhilwara	Banda	Reserved	270.00
6	Bhilwara	Bijli Mariya A	Protected	183.00
7	Bhilwara	Bijli Mariya B	Protected	181.00
8	Bhilwara	Damti	Protected	3221.00
9	Bhilwara	Dhanwada	Reserved	1080.00
10	Bhilwara	Doli Dooma	Protected	761.00
11	Bhilwara	Doli Doomra	Protected	396.00
12	Bhilwara	Gupteshwar	Reserved	600.40
13	Bhilwara	Guwadiyon Ki Dhar	Protected	466.00
14	Bhilwara	Jalam Ki Jhopdi	Unclassed	20.12
15	Bhilwara	Khardiya	Reserved	688.00
16	Bhilwara	Magar Deh	Reserved	2501.00
17	Bhilwara	Makdiya	Reserved	31.75
18	Bhilwara	Makdiya Kali Khol	Reserved	127.00
19	Bhilwara	Mandalgarh	Reserved	302.00
20	Bhilwara	Mataji Ki Dhar	Protected	63.00
21	Bhilwara	Modi Mahadev	Reserved	384.91

22	Bhilwara	Modiya Magra	Protected	38.00
23	Bhilwara	Nahariya Jageer	Reserved	133.00
24	Bhilwara	Naya Nagar	Protected	3402.00
25	Bhilwara	Padkiya	Protected	313.00
26	Bhilwara	Rahudas Ki Bewdi	Protected	29.00
27	Bhilwara	Richhod	Reserved	1056.00
28	Bhilwara	Saimala	Reserved	2851.41
29	Bhilwara	Satpudi	Reserved	60.71
30	Bhilwara	Singoli	Reserved	649.29
31	Bhilwara	Sone Ka Taka	Reserved	817.00
32	Bhilwara	Tikhi	Reserved	2698.00
33	Bhilwara	Unda Khol	Reserved	374.00
34	Chittorgarh	Chandakheri Palka	Protected	1307.00
35	Chittorgarh	Gopalpura	Unclassed	16.10
36	Chittorgarh	Katunda Mahupura	Protected	1432.00
37	Chittorgarh	Marna	Protected	1970.00
38	Chittorgarh	Menal	Protected	2030.00
39	Chittorgarh	Samaria Rawarda	Protected	2650.00

The details are shown on the map below.



# x. Sitamata Sanctuary to Jaisamand Sanctuary

The corridor length is almost 51.63 km but as can be observed from the map, there is contiguous forest connected by drainage lines including Gomthi river.

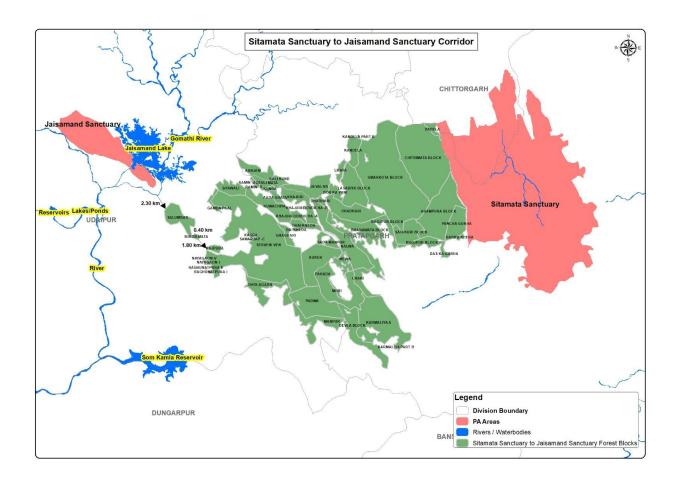
S. No.	Forests between which there is gap		Distance	Revenue villages in between	
S. NO.	From	То	Distance	Revenue vinages in between	
1	Gomthi River	Salumbar	2.30 km	Kherad, Tulchhon Ka Namla	
2	Salumbar	Sunar mata	0.40 km	Salumbar (M)	
3	Sunar Mata	Rajpura	1.80 km	Salumbar(M), Rajpura, Manpura	

The forest blocks included in the corridor are as under

S. No.	Division	Block	Legal Status	Area (in ha)
1	Pratapgarh	Aanjani	Protected	686.00
2	Pratapgarh	Bor Ka Pani	Protected	370.00
3	Pratapgarh	Chitrimata Block	Reserved	6473.00
4	Pratapgarh	Dabela	Protected	388.00
5	Pratapgarh	Devaliya	Protected	1230.00
6	Pratapgarh	Kali Kund	Protected	227.00
7	Pratapgarh	Kandela	Reserved	623.00
8	Pratapgarh	Kandela Part B	Reserved	10.00
9	Pratapgarh	Lasadiya Block	Protected	1612.00
10	Pratapgarh	Lifafa	Protected	211.00
11	Pratapgarh	Umarkota Block	Reserved	9698.00
12	Pratapgarh	Arampura Block	Reserved	3188.00
13	Pratapgarh	Bhanawata Block	Protected	1392.00
14	Pratapgarh	Bhojpur Block	Protected	445.00
15	Pratapgarh	Bhojpur Block B	Protected	556.00
16	Pratapgarh	Chari	Protected	1646.00
17	Pratapgarh	Dabiya Khera	Protected	67.44
18	Pratapgarh	Das Ka Gurha	Protected	173.00
19	Pratapgarh	Devla Block	Protected	1634.00
20	Pratapgarh	Dhadhari	Protected	2183.00
21	Pratapgarh	Karmaliya A	Reserved	3747.00
22	Pratapgarh	Karmaliya Part B	Protected	25.62
23	Pratapgarh	Mewa	Protected	482.00
24	Pratapgarh	Mobi	Protected	91.00
25	Pratapgarh	Nalwa	Protected	2120.00
26	Pratapgarh	Pahada	Reserved	2167.00
27	Pratapgarh	Pancha Gurha	Reserved	1105.00

28	Pratapgarh	Satakuri Block	Reserved	1138.00
29	Udaipur	Aada Ghata	Reserved	209.37
30	Udaipur	Amba Mata/Amba	Protected	24.28
31	Udaipur	Dai Kheda	Protected	48.00
32	Udaipur	Devli Mata	Reserved	409.38
33	Udaipur	Dhadhari	Protected	328.29
34	Udaipur	Dhai Kheda	Reserved	457.13
35	Udaipur	Dholagarh	Protected	1275.48
36	Udaipur	Gamda Paal	Unclassed	232.77
37	Udaipur	Ghaghari	Protected	328.29
38	Udaipur	Kagra	Protected	15.00
39	Udaipur	Khajuri	Reserved	970.87
40	Udaipur	Khajuri Dovdicha -A	Protected	220.00
41	Udaipur	Khajuri Dovdicha -B	Protected	23.00
42	Udaipur	Kukda	Reserved	2095.69
43	Udaipur	Kunda	Protected	101.00
44	Udaipur	Kuwachiya	Reserved	1204.60
45	Udaipur	Manpur	Protected	1150.06
46	Udaipur	Nayagaon-I	Unclassed	41.00
47	Udaipur	Nayagaon-Ii	Unclassed	4.00
48	Udaipur	Nayagaon-Iii	Unclassed	9.72
49	Udaipur	Nayagaon-Iv	Unclassed	7.21
50	Udaipur	Nayagaon-V	Unclassed	45.00
51	Udaipur	Padwa	Reserved	2427.35
52	Udaipur	Raghunatpura I	Unclassed	30.36
53	Udaipur	Raghunatpura Ii	Unclassed	1.55
54	Udaipur	Rajpura	Protected	176.00
55	Udaipur	Ramin -A	Protected	77.60
56	Udaipur	Ramin -B	Protected	27.00
57	Udaipur	Sada Manpur	Protected	362.42
58	Udaipur	Salumbar	Reserved	1056.31
59	Udaipur	Samarjap -C	Protected	27.00
60	Udaipur	Serveni Van	Reserved	10231.78
61	Udaipur	Sitawali	Reserved	675.82
62	Udaipur	Sunar Mata	Protected	54.00

The map of the corridor is as under:



## xi. Proposed Kumbhalgarh Tiger Reserve to Mount Abu Sanctuary

There are several options for this corridor and the corridor is almost continuous forest with drainage lines connecting the gaps. The details of the corridors are as under:

## First corridor

Forest blocks between	een which there is gap	Distance	Davanya Villagas in Datwaan	
From	То	Distance	Revenue Villages in Between	
Mt Abu Sanctuary	West Banas river	3.93 km	Block No. 2, Kachholi	
			Patumburi, Bhavri, Dhanari,	
Along West Banas	Kumbhalgarh Tiger	34.88	Kodarla, Banas, Ghodiyawa,	
river	Reserve (proposed)	km	Basantgarh, Ajari, Kantal,	
			Kalumbari, Dhanga, Gharat	

### Second corridor

Forest blocks between	een which there is gap	Distance	Revenue Villages in Between	
From To		Distance	Revenue vinages in Detween	
Mt Abu Sanctuary	West Banas river	5.32 km	Block No. 2, Nagpura, Kaseenda,	
Wit Abu Sanctuary	West Ballas IIVel	3.32 KIII	Bharja	

Along West Banas	Kumbhalgarh Tiger	28.97	Bharja, Taroongi, Vatera, Sanwara,
river	Reserve (proposed)	km	Rohira, Wasa, Waloriya, Moras

### Third corridor

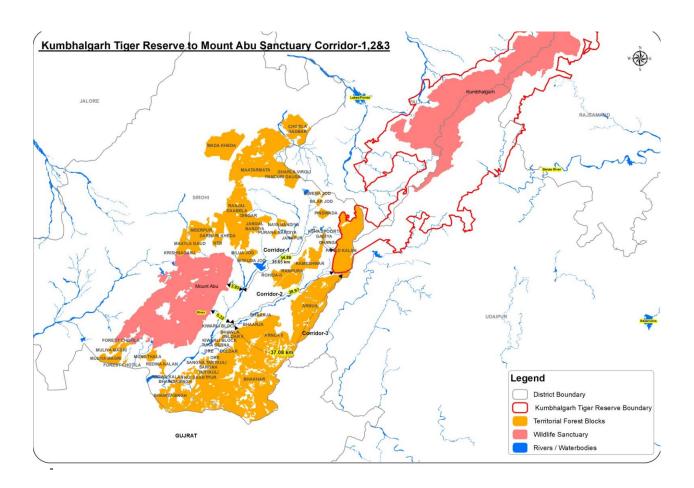
Forest blocks between	een which there is gap	Distance	Revenue Villages in Between
From	То	Distance	Revenue vinages in Between
Mt Abu Sanctuary	West Banas river	5.32 km	Block No. 2, Nagpura, Kaseenda, Bharja
Along West Banas river	Bhaarja Block	0.32 km	Bharja
Bharja Block	Kumbhalgarh Tiger Reserve (proposed) via Arnua Block	36.76 km	Tankiya, Dovtra, Bori Booj, Bhoola, Semli, Waloriya, Moras, Kara, Pahar Kalan

# The forest blocks included in the corridors are as under

S. No.	Division	Block	Legal Status	Area (in ha)
1	Sirohi	Arnua	Protected	10437.70
2	Sirohi	Arnua II	Unclassed	1717.00
3	Sirohi	Bhainsasingh	Reserved	3113.80
4	Sirohi	Bhakhar	Reserved	31034.00
5	Sirohi	Forest Chotila	Reserved	1162.30
6	Sirohi	Pahad Kalan	Protected	7004.10
7	Sirohi	Bhaarja	Protected	715.70
8	Sirohi	Deldar	Reserved	623.50
9	Sirohi	Deldar II	Unclassed	385.00
10	Sirohi	Dhawla	Reserved	33.20
11	Sirohi	Janapur	Reserved	103.60
12	Sirohi	Kiwarli Block	Reserved	224.30
13	Sirohi	Kiwarli Jod	Reserved	50.30
14	Sirohi	Kui Saantpur	Reserved	867.20
15	Sirohi	Muliya Magri	Protected	722.40
16	Sirohi	Mungthala	Reserved	192.00
17	Sirohi	Rameshwar	Reserved	3629.00
18	Sirohi	Rampura	Reserved	232.00
19	Sirohi	Redwa Kalan	Reserved	410.00
20	Sirohi	Sangna Tartauli	Reserved	573.40
21	Sirohi	Tuka Derna	Reserved	69.50
22	Sirohi	Rohida	Reserved	810.20
23	Sirohi	Ore	Reserved	15.00
24	Sirohi	Kshatipoorti Gadiya	Unclassed	41.65
25	Sirohi	Dhanga	Protected	21.42
26	Sirohi	Lautana	Protected	3592.70

27	Sirohi	Meerpur	Protected	2883.40
28	Sirohi	Chotila Radbar	Protected	2835.40
29	Sirohi	Maatarmata	Protected	11014.00
30	Sirohi	Raajal Daabela	Protected	4533.00
31	Sirohi	Wada Kheda	Reserved	4331.50

The map of the corridors is as under:



## xii. Sariska Tiger Reserve to Ranthambhore Tiger Reserve

There are two corridors which can be developed between Sariska and Ranthambhore Tiger Reserves namely Sariska Tiger Reserve to Gol CCE to Ranthambhore Tiger Reserve; and Sariska to Keoladeo National Park (via Ruparel river) to Bandh Baretha Sanctuary to Ranthambhore Tiger Reserve.

## a. Sariska Tiger Reserve to Gol CCE to Ranthambhore Tiger Reserve

The first part of the corridor connects Sariska Tiger Reserve to Gol CCE through Morel and Banganga rivers as under:

Forest blocks between which there is gap		Distance	Revenue Villages in Between	
From	То	Distance	Revenue vinages in between	
Nahar Khora Main	Nahar Khora No. 11 A	0.80 km	Nahar Khora	
Mehandipur Ki Dungari	Patoli Gagwana	0.45 km	Dantli	
Patoli Gagwana	Sariska Tiger Reserve	32.23 km (via River)	Karnawar, Ukeri, Dubbi, Chanpawas, Maliwas, Mau Kalan, Seemla, Gullana,Parla, Bas Biwai, Biwai, Girdharpura, Jaipura, Dewara, Khari Ki Jhonpari, Patar Khera, Papraki, Banapura, Liloj, Jhoonpri Pesarana	

The forest blocks involved are

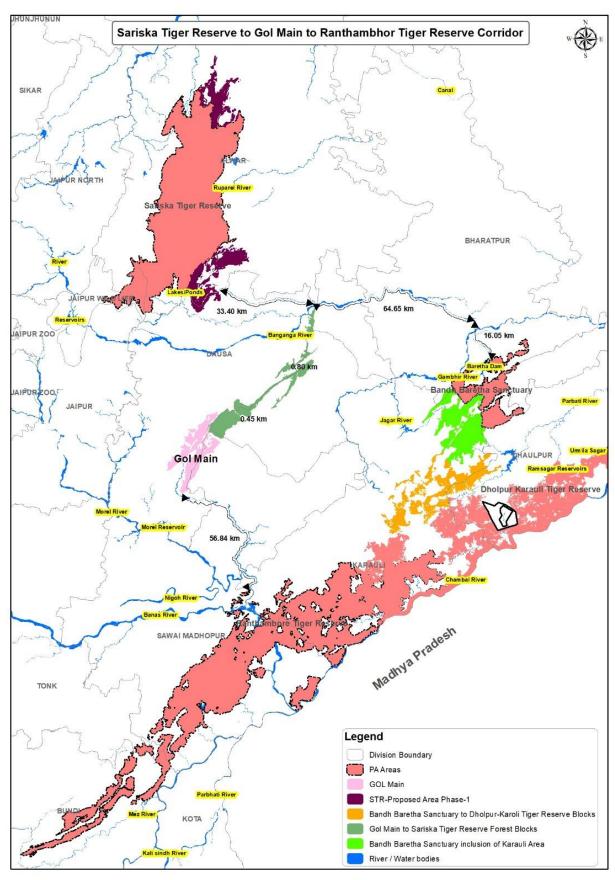
S. No.	District	Block	Legal Status	Area (in ha)
1	Dausa	Patoli Gagwana	Reserved	1215.09
2	Dausa	Mehandipura Ki Dungri No 12 (Part Dausa)	Reserved	49.71
3	Karauli	Mehandipur Ki Dungari (Part Karauli)	Reserved	54.69

The second part of the corridor connects Gol CCE to Ranthambhore Tiger Reserve through the tributaries of Banas river flowing out of Gol CCE.

Forest blocks between which there is gap		Distance	Revenue Villages in Between	
From	То	Distance	Revenue vinages in Between	
Gol CCE	Ranthambhore Tiger Reserve	56.84 km	Theekariya, Govindpura, Palasod, Nandpura, Kunkata Kalan, Kari Gaonri, Kari Jhonpari, Jakholas Khurd, Jakholas Kalan, Jeewad, Jaitpur, Ramgarh Murara, Khera Barh Ramgarh, Bhinora, Barh Guwari, Kherla, Nananwas, Neemoda, Sankra	

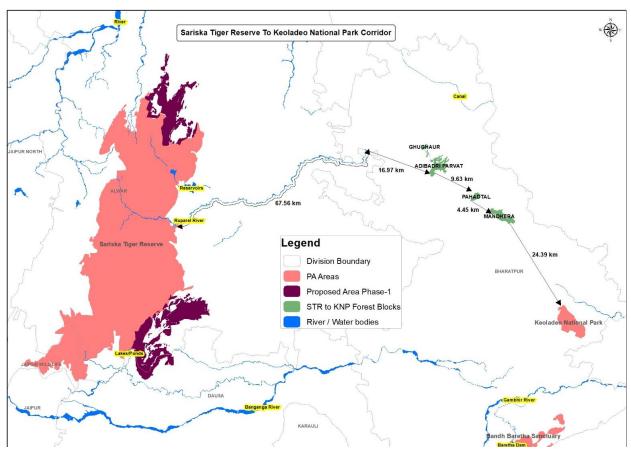
No forest blocks are involved in the second part of the corridor.

The total length of this part of the corridor is about 127 km including the two parts and within Gol CCE as per the map below:



# b. Sariska Tiger Reserve to Keoladeo National Park (via Ruparel river) to Bandh Baretha Sanctuary to Ranthambhore Tiger Reserve

The corridor consists of three parts - the first part of the corridor consisits of Ruparel river originating in Sariska Tiger Reserve which flows towards Keoladeo National Par The first part of the corridor consisits of Ruparel river originating in Sariska Tiger Reserve which flows towards Keoladeo National Park which will culminate in Keoladeo National Park. The second and third part connect Keoladeo National Park to Ranthambhore Tiger Reserve along Gambhir river. The map of the first part of the corridor is as under:



The first part of the corridor can be connected through forest blocks by a 123 km corridor as indicated below

Forest blocks betw	een which there is gap	Distance	Revenue villages in between		
From	То	Distance	Revenue vinages in between		
Sariska Tiger	Along Ruparel River	67.56 km	Udaipur Niham, Wajeer Kheri, Chidwai, Barwada, Pagseri,		
Reserve	Mong Ruparer River	07.30 Km	Milakpur, Saidampur, Naswari,		
			Mundpuri Kalan, Sahanka, Kherli		

			Bahadar, Nyana, Harsoli, Govindpura, Shahpur, Jadoli, Agaraka, Senthli, Chamarwara, Shakipura, Khera Mahmood, Mangleshpur, Nizamnagar, Jugrawar, Bhayari, Bedha, Kanor, Moonpur, Seetal, Mahlakpur, Ghat, Khunteta Kalan, airwara, Indragarh, Naithla, Haldeena, Goojar Bas, Khunteta Khurd, Bandipura, Sohanpur, Dhola Palas, Nithari, Mohabbatpur, Bichpuri, Manpura, Navli @ Baldeopura, Impipura
Ruparel River	Ghughaur	16.97 km	Udaipur Niham, Wajeer Kheri, Tajpur, Pagseri, Chhpar, Kaimasa, Edward Manpur, Kolri, Jaishri (Jaisri), Baldeobas, Palka, Garhi Mewat, Bayari, Roopwas, Jageer Gulpara, Barka, Raipur Suketi, Jatwas
Adibadri Parvat	Pahadtal	9.63 km	Nagla Khoh, Jateri, Toda, Hayatpur, Barai, Nigohi, Adhawali, Bandha Khalsa, Bandha Chauth, Narena Katta, Pahartal
Pahadtal	Mandhera	4.45 km	Bahtana, Kuchawati, Khohri, Kheriya Purohitan, Songaon, Chak Keshopura
Mandhera	Keoladeo National Park	24.39 km	Bharatpur(MCl+OG), Karua, Kasot, Nagla Gangi, Indoo, Saman, Dandoo, Khan, Surauta, Lakhan, Adhaiya Kalan, Dahra, Belara Khurd, Chak Luchpuri, Nagla Tuhiram, Nagla Sawairam, Nagla Jodhsingh, Ghana Bhandor, Bhandor, Gundwa, Malah

S. No.	Division	Block	Legal Status	Area (In Ha)
1	Bharatpur	Adibadri Parvat	Protected	1160.46
2	Bharatpur	Mandhera	Protected	888.36
3	Bharatpur	Pahadtal	Protected	263.05
4	Bharatpur	Ghughaur	Protected	296.62

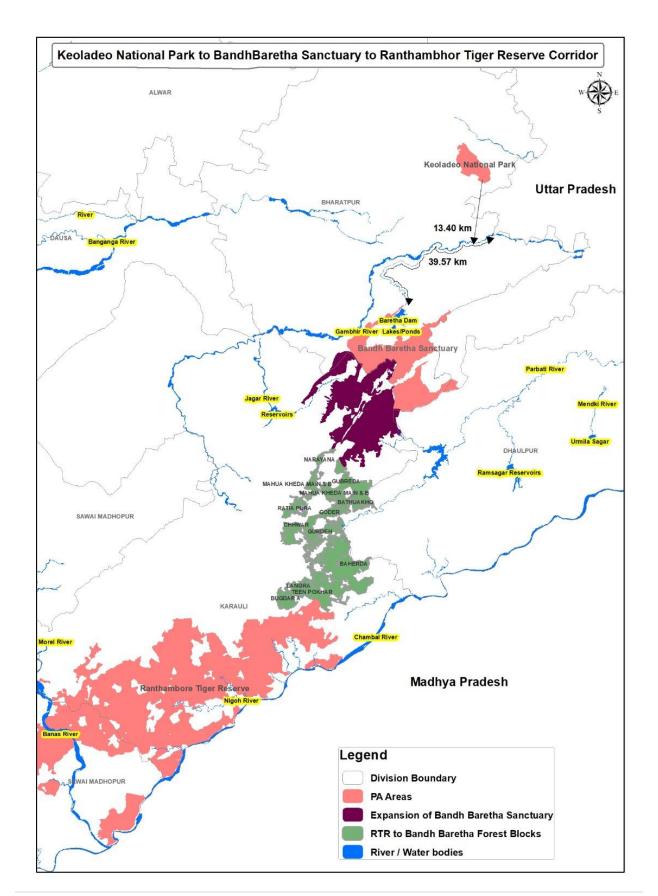
The second part of the corridor connects Keoladeo National Park to Bandh Baretha Sanctuary through the Gambhir river. This corridor was used by a tiger RBT7 (later ST6) in 2011 to reach the National Park. The connection to Gambhir river is 13.40 km and the details are as under:

Forest blocks where there is gap		Distance	Revenue Villages in between	
From	To	Distance	Revenue Villages III between	
Keoladeo National Park	Along Gambhir River	13.40 km	Aghapur, Chak Shyosingh, Chak Kurka, Nagla Kalyanpur, Kalyanpur, Daulatgarh, Tehra Ghori Banjara, Sikroda, Gahnoli, Sedpura, Jindpura, Chandoli	

The third part of the corridor is through the forests of Bandh Baretha sanctuary which are contiguous to territorial forests of Karauli and thence to Ranthambhore Tiger Reserve. the forest blocks between Bandh Baretha Sanctuary and Ranthambhore Tiger Reserve are as under:

S. No.	Division	Block	Legal Status	Area (In Ha)
1	Karauli	Atta Main & B	Protected	786.83
2	Karauli	Bari Roondh Surdan	Protected	1839.00
3	Karauli	Chend	Protected	158.02
4	Karauli	Chhwar	Protected	2225.01
5	Karauli	Dan Ki Dagaria	Protected	712.61
6	Karauli	Khoob Nagar	Protected	635.45
7	Karauli	Lakhora	Protected	58.41
8	Karauli	Ratia Pura	Protected	1114.87
9	Karauli	Gurdeh	Protected	2405.12
10	Karauli	Goder	Protected	818.47
11	Karauli	Gubreda	Protected	2336.38
12	Karauli	Ledore Main & B	Protected	300.74
13	Karauli	Mahua Kheda Main & B	Protected	1859.40
14	Karauli	Mardai Daudpur	Protected	1588.66
15	Karauli	Nala Sirsni	Protected	132.21
16	Karauli	Narayana	Protected	672.27

The map of the second and third part is given below:



## **CHAPTER 6**

# **HUMAN-TIGER INTERFACE AND ITS MANAGEMENT**

The areas identified as potential tiger habitats for resident and migrant tigers under this Long Term Conservation Action Plan are summarized as under:

S. No.	Tiger Reserve / Landscape	Area
		(in Sq Km)
1.	Declared Tiger Reserves (Ranthambhore, Sariska, Mukundara	4882.14
	Hills & Ramgarh Vishdhari)	
2.	Expansion of Tiger Reserves approved by NTCA (Ranthambhore,	1922.53
	Sariska & Mukundara Hills)	
3.	Tiger Reserve approved by NTCA (Dholpur Karauli) &	3811.90
	principally approved by NTCA (Kumbhalgarh)	
4.	Other parts of Northern Rajasthan	559.55
5.	Other parts of Eastern Rajasthan in Dholpur, Karauli and	627.98
	Bharatpur (Bandh Baretha)	
6.	Potential Baran Tiger Reserve	1291.92
7.	Potential Southern Rajasthan Tiger Reserve Part I	2864.54
8.	Potential Southern Rajasthan Tiger Reserve Part II	1835.40
9.	Other parts of Southern Rajasthan including Mt Abu Sanctuary	629.62
10.	Gol Critical Corridor Element	369.91
11.	Shergarh Critical Corridor Element	471.62
12.	Bassi Critical Corridor Element	311.57
TOTAL		19578.68

In such a scenario and assuming that arid areas can hold up to five tigers (1 male:4 female) per 100 sq km, the projected carrying capacity for Rajasthan is a minimum of 979 tigers. The numbers could be much more if the habitats can be developed to the level of habitats in Ranthambhore Tiger Reserve. It must be mentioned that the data collection exercises prescribed by this plan will yield a more robust estimate of the projected tiger numbers. As population of tiger increase, the chances of human-tiger interaction will increase. The high level of conflict in case of Chandrapur, Maharashtra and Terai region of Dudhwa are examples of what can happen. The long term plan needs to tackle this issue of human tiger conflict and its mitigation.

Wildlife management principles advocate a mosaic of 'sources' and 'sinks' for long term conservation of any species wherein sources need to be managed for working as a fountainhead of population and should be managed intensively and kept free of anthropogenic disturbances.

The excess population from the sources will overflow into neighbouring araes or sinks. As long as the source is intact, long term survival of the species is ensured. Of course, the source should be able to hold a minimum viable population. In view of the limited space available in a densely populated country like India, the viable population can be sustained in several islands connected by coridors. In the Wildlife (Protection) Act 1972, this concept has been translated into Core or Critical Tiger Habitat and Buffer in a Tiger Reserve. There are two approaches which need to be simultaneously implemented to manage this interface as under:

## **Exclusion Approach**

This approach is to be implemented in the Core area with following activities to be implemented intensively:

- 1. Voluntary village relocation
- 2. Mitigation of anthropogenic disturbance
  - Mitigation of roads
  - Mitigation of rail network
  - Mitigation of religious disturbance
  - Mitigation of competition for water
  - Mitigation of competition of other forest resources
- 3. Development of protection network
  - Construction of protection walls
  - Creation of peripheral protection road network
  - Development of patrolling paths
- 4. Habitat development
- 5. Intensive monitoring

#### **Co-existence Approach**

Mitigating human-tiger conflicts in the buffer area where tiger and human populations are mandated to exist, is crucial for ensuring the conservation of tigers and the safety of local communities in buffer areas. In the case of Rajasthan, here are some measures that can be considered:

1. Payment for Ecosystem Services (PES): The incentives offered to farmers or landowners in exchange for managing their land to support tiger conservation need to be institutionalized and

encourages. The concept of COCOON conservancies which are being successfully implemented in Tadoba Andhari Tiger Reserve can be implemented in Rajasthan also as advocated by Mr Sunil Mehta, Member. Dr Rajesh Gopal, another member has also been continuously advocating that the concept of PES should be implemented in order to expand tiger conservation.

- 2. Community Engagement: Engage with local communities living near tiger habitats to raise awareness about the importance of tiger conservation and the potential risks associated with living in close proximity to tigers. Encourage community participation in decision-making processes and involve them in conservation efforts.
- 3. Education and Outreach: Conduct educational programs in schools and villages to promote coexistence and educate people about tiger behaviour, appropriate responses during encounters, and methods to minimize conflicts. This can include workshops, documentaries, and interactive sessions.
- 4. Livelihood Support: Explore sustainable livelihood options for communities residing near tiger habitats. Support alternative income-generating activities such as ecotourism, organic farming, handicrafts, or vocational training to reduce dependence on forest resources and minimize the need for encroachment into tiger territories.
- 5. Conflict Resolution: Establish a dedicated team of wildlife managers and trained personnel to respond promptly to conflict situations. This team should be equipped with non-lethal methods to deter tigers from entering human settlements, such as noise-making devices, bright lights, and firecrackers.
- 6. Habitat Management: Improve habitat quality within buffer areas of tiger reserves by implementing effective land-use planning, habitat restoration, and anti-poaching measures. Maintaining healthy prey populations within tiger habitats is also crucial to prevent tigers from seeking alternative food sources near human settlements.
- 7. Early Warning Systems: Early warning systems using technology, such as camera traps and sensor-based devices, to detect tiger movement near human settlements. This can help alert communities and provide them with time to take necessary precautions.
- 8. Collaborative Approach: Foster collaboration among local communities, government agencies, NGOs, and conservation organizations to jointly address human-tiger conflicts. Establish platforms for regular dialogue, information sharing, and joint decision-making.

9. Research and Monitoring: Conduction of regular research and monitoring to understand the dynamics of human-tiger conflicts in Rajasthan. This can help identify hotspot areas, assess the effectiveness of mitigation measures, and adapt strategies accordingly.

It is important to implement these measures while considering the specific ecological, socioeconomic, and cultural aspects of the region. Collaboration and long-term commitment are key to effectively mitigate human-tiger conflicts and ensure the coexistence of tigers and communities in Rajasthan.

## **CHAPTER 7**

# OTHER INTERVENTIONS

Conserving tigers in Rajasthan requires a comprehensive and long-term approach that addresses various aspects of their habitat, protection, and coexistence with local communities. Some key interventions and suggestions offered by committee members Sh. Bharat Singh, Sh. Rajesh Gopal, Dr. Y.V. Jhala, Sh. Ravi Singh, Dr. Amit Mallick, Sh. Sunil Mehta, Sh. Jaisal Singh, Sh. Dheerendra Godha and Smt. Simrat Kaur Sandhu for the long-term tiger conservation plan in Rajasthan have been covered in the report at various places in the form of following interventions:

## 1. Expansion of existing tiger habitats

The issue has been treated at length in Chapter 3 of this report. **Two major potential tiger** landscapes in Baran and Mewar region have been identified while other minor habitats have also been mentioned. **Three** critical areas in the corridors connecting the potential tiger habitats have also been identified and termed as **Critical Corridor Elements**.

## 2. Addition of new conservation landscapes

- Creation of Conservation Reserves and Corridors
- Chapter 4 has dealt with the issue of corridors at length while already declared Conservation Reserves which have a significant potential have been mentioned in Chapter 3.
- Developing community based conservation initiatives like Community Reserves,
   COCOON etc.

The corridors identified in Chapter 4 and areas adjacent to potential and existing tiger habitats are candidates for such interventions

#### 3. Deployment of additional staff

Attempts have been made to mitigate the impact of vacancies by deploying Home Guards, Civil Defence Volunteers, Ex Servicemen and Border Home Guards against the vacancies. Efforts for filling up the vacancies have also started bearing fruit with Assistant Conservator of Forests and Range Forest Officers Grade I currently undergoing training after recruitment. Foresters have also been appointed while the recruitment of Forest Guards is also nearing completion.

Special Tiger Protection Force has also been established in all Tiger Reserves and made functional by deployment of Border Home Guards in compliance of the orders of the Hon'ble High Court Jaipur.

### 4. Providing incentives to wildlife staff

Efforts for providing extra incentive to field staff working in wildlife areas has however not been successful as yet.

#### 5. Strengthening Anti-Poaching Efforts

The measures initiated include establishment of Wildlife Crime Cell and coordination with Wildlife Crime Control Bureau at the national level. The following efforts also need to be undertaken:

- Enhancing anti-poaching units with proper training, equipment, and technology, including surveillance systems, camera traps, and use of sniffer dogs.
- Strengthening of intelligence networks and collaborate with law enforcement agencies to combat wildlife trafficking and dismantle poaching networks.
- Establishment of a rapid response mechanism to address and investigate wildlife crime incidents promptly.

## 6. Wildlife Monitoring

Modern tools and techniques for wildlife monitoring are being deployed. mStripes is now fully functional in the Tiger Reserves of the State. Wildlife Surveillance & Anti Poaching System is being expanded and modernized to provide better results.

### 7. Capacity building for wildlife conservation

Capacity building needs to be taken up at a larger scale once the vacancies are filled up. Special efforts will have to be undertaken to achieve the desired level of expertise for wildlife conservation.

### 8. Development of wildlife habitat

Removal of exotic weeds, grassland development and plantation of browsable species has been taken up in almost all Protected Areas of the state to develop wildlife habitat.

### 9. Creation of Prey Base nurseries

To enhance the prey base in Rajasthan, creation of nurseries within or near protected areas is advisable. Selection of key prey species such as sambar deer, spotted deer, wild boar, and

nilgai and development of suitable habitats, and providing natural vegetation, water sources, and habitats needs to be scientifically taken up with agenda of establishing breeding programs, monitoring health, and preparing animals for release by rewilding. This can be done with the help and involvement of local communities to raise awareness, and conduct regular monitoring to assess success and effective implementation. The work has been initiated with enclosures and rewilding areas being developed in Nahargarh, Marmada (Karauli), Darrah (Mukundara), Modiya (Kumbhalgarh), Jaisamand and Machia (Jodhpur). Further enclosures are being planned in Phulwari ki Nal, Dholpur and other sanctuaries too.

### 10. Community Engagement and Livelihood Support

The following activities need to be taken up

- Involvement of local communities in tiger conservation efforts through awareness campaigns, education programs, and participation in decision-making processes.
- Enhancement of sustainable livelihood options, such as eco-tourism, organic farming, and community-based enterprises, to reduce dependency on forest resources.
- Development of compensation and insurance schemes for communities affected by wildlife depredation to ensure their support and cooperation in conservation efforts.

### 11. Research, Monitoring, and Conservation Education

The following activities need to be taken up

- Conduct of scientific research on tiger populations, their prey base, and ecological dynamics to inform conservation planning and adaptive management.
- Establishment of a comprehensive monitoring system using advanced technologies like camera trapping, DNA analysis, and satellite telemetry to track tiger movements and population trends.
- Strengthening conservation education programs in schools and local communities to raise awareness about the importance of tigers and their conservation.

### 12. Strengthening Collaboration and Governance

The following activities need to be taken up

- Encouragement of collaboration and coordination among government agencies,
   NGOs, local communities, and other stakeholders through joint planning and implementation of conservation initiatives.
- Enhancing the capacity of forest departments in terms of personnel, infrastructure, and funding to effectively manage tiger habitats and combat wildlife crimes.
- Establishment of a robust governance framework with clear policies, regulations, and legal provisions for tiger conservation, focusing on enforcement and compliance mechanisms.

### 13. International Cooperation and Awareness

The following activities need to be taken up

- Engage in international collaborations for information sharing, best practices, and financial support to strengthen tiger conservation efforts in Rajasthan.
- Raising global awareness about the significance of tigers and their habitats through campaigns, partnerships with international organizations, and participation in conservation forums.

### 14. Long-term Funding and Sustainability

The financial sustainability of the endeavor of tiger conservation will depend on creation of new funding sources. The ploughback of Eco Development Surcharge has been provided by the State Government, Corporate Social Responsibility funds have started flowing in, the State Government has also stepped up its allocation but other avenues need to be explored. Efforts have been initiated to earn carbon credits as an additional financial resource. The following activities need to be taken up

- Development of a sustainable funding mechanism for tiger conservation, including public-private partnerships, corporate sponsorships, and innovative financing models.
- Advocacy for the integration of tiger conservation into national and state-level development plans to ensure long-term financial and policy support.
- Regular assessment of the effectiveness of interventions and adapt conservation strategies based on scientific evidence and lessons learned.

These interventions provide a foundation for long-term tiger conservation in Rajasthan. Moreover, for actual achievement of the projected tiger numbers, it is essential to adapt and tailor these strategies to the specific ecological, socio-economic, and cultural contexts of the region. Regular monitoring, evaluation, and adaptive management should be integral to the plan to assess its effectiveness and make necessary adjustments over time. Ultimately, the success of tiger conservation in Rajasthan relies on the collaborative efforts of government agencies, local communities, conservation organizations, and the active participation of all stakeholders involved.

## **CHAPTER 8**

# **OPERATIONALIZING THE PLAN**

The long term plan has identified potential tiger habitats in Northern Rajasthan, Southern Rajasthan, Eastern Rajasthan including Hadoti region concluding that

- 1. There are two more potential tiger reserves (Baran Tiger Reserve & Southern Rajasthan Tiger Reserve) apart from the four existing tiger reserves (Ranthambhore, Sariska, Mukundara Hills & Ramgarh Vishdhari) and two tiger reserves under process of establishment (Dholpur Karauli & Kumbhalgarh)
- 2. There are three Critical Corridor Elements (Gol, Shergarh & Bassi)
- 3. There are **twelve major corridors** apart from the ones that have already been secured along Chambal river.

Operationalizing this long term plan requires sustained effort and careful planning adopting a dynamic approach with frequent review of the milestones achieved. Some suggestions for successful operalization are as under:

## 1 Towards identification of suitable habitat for Tigers

The following approach will be undertaken for implementation of the action plan:

- a. As a follow up to the GIS based identification of potential tiger habitats, an exercise will be undertaken to delineate ecologically viable and socially sound habitat complexes which can support tiger populations over the long term.
- b. This would require more granular mapping, ground truthing and consultative processes with key stakeholder groups.

#### i. Mapping:

- 1. Identify patches with contiguous areas of forest cover. Where there are discontinuities in forest cover, a different patch will need to be delineated. Rank forest patches by area and size classes
- 2. Classify or rank patches based on standard fragmentation and isolation metrics.

- 3. Classify or rank patches based on forest cover and vegetation types and composition, both canopy and understory (remotely sensed data)
- 4. Map land use and land tenure capturing de facto and de jure land use by local communities and other actors including villages / habitations, common grazing lands / orans, livestock density, roads, mines and other development infrastructure.

### ii. Ground truthing:

- Rapid ecological field surveys and camera trapping to establish occurrence or relative abundance of prey species (ungulates) and other species of conservation interest, potentially including birds
- 2. Collate data and conduct a qualitative assessment of hunting and its drivers, especially for wild ungulates.
- 3. Field surveys to determine habitat quality and degradation including availability of water, invasive and composition of the understory.
- 4. Assess and identify and delineate areas where rights to local communities have been granted/ are deemed eligible under the Forest Rights Act.
- 5. Combine above with exercises to quantify the extent of human use of forests.
- 6. Evaluate through surveys peoples' attitudes and perception to the idea of tiger reintroduction/ presence
- 7. Assess current protection capacity levels and infrastructure, based on a security audit or similar exercise.

The above information and other relevant data can be used to rigorously establish tiger, prey and habitat conservation criteria – based on these and other metrics to identify and distinguish between habitats that can potentially support resident (and viable tiger populations), and dispersal habitats and corridors that tigers can use with a high probability of 'spilling over' into the surrounding non-forest matrix. These criteria can be linked with population viability analysis

and spatial conservation prioritization to project the spatial viability of tiger populations and 'optimization' of conservation planning for tigers.

Areas identified under the Long Term Action Plan as potential tiger habitats or corridors will also be strengthened through additional recruitment of frontline staff and targeted capacity-building efforts for wildlife conservation in these areas.

The major challenges in the identified areas lie in improving preybase in southern Rajasthan and Baran, tackling forest right issues, securing Gol CCE and resolving encroachments and other anthropogenic pressures.

### 2 Securing and managing wildlife corridors

Mapping corridors including the non-forest areas, understanding threats, use by wildlife, examining the need for restoration, communities living in the corridor- their dependence on the corridor forests and the conflict they face are some of the things that are necessary to work towards securing corridors. The following approach will be undertaken for implementation of the corridor component of the action plan:

- a. Mapping and connectivity modelling:
  - i. Spatially assess structural and functional connectivity between forest patches in the context of land use, land cover and barriers to wildlife movement, including linear infrastructure.
- b. Multi-stakeholder engagement exercises:
  - i. Because designating Protected Areas in corridors areas may not always be possible and even where possible such action will require community consent, community engagement exercises will be undertaken to enable support and participatory management initiatives in the corridors.
  - ii. Similarly, with corridor areas in particular being sites of high anthropogenic activity including siting of linear infrastructure, urban and industrial expansion, mining etc. these stakeholder groups will be engaged with to seek their support for implementation of mitigation measures (overpasses and underpasses) and enable wildlife movement.
- c. Securing corridors to maintain genetic diversity

- i. For genetic diversity, maintenance of the functionality of corridors and restoration of areas that have broken connectivity will be taken up.
- ii. Corridors along rivers and drainage lines are disturbed because of habitations and agriculture. This requires special attention in terms of creating riverbank plantation strips, "habitation bye-passes", and regulation of riverbed and riverbank agriculture.
- iii. Genetic studies and tiger monitoring in collaboration with scientific institutes like NCBS and WII will also be undertaken

The corridor areas involving mainly forests are easier to develop but major challenges lie in securing corridors along drainage lines in revenue areas. The corridors between Ranthambhore and Sariska; Ramgarh Vishdhari and Kumbhalgarh; and Bassi CCE and Sitamata Sanctuary are of prime importance with the latter being the most crucial and to be tackled with utmost urgency to ensure tiger movement towards South Rajasthan.

#### 3 Other focal areas

- a. In any areas identified as suitable habitat, there will be a strong focus on proactively developing context specific conflict mitigation strategies, with contingency plans for 'straying' tigers.
- b. Short, medium and long-term financial outlays will be worked out to determine resources required for recovery and addressing human-wildlife conflict.
- c. The Long Term Action Plan will also reveal where the conservation of other wildlife including ungulates, small cats (caracal), wild canids (wolves) and raptors needs to be prioritized within the state. These can include areas of significant wildlife value like the Chambal River Basin and other similar ecosystems.
- d. The Long Term Action Plan will in the future endeavour to take into account the effects of climate change which are visible in the state. There could be substantial change in the habitat and vegetation characteristics in the state. Therefore, climate projections and related strategies for responding to climate change effects are to be included in the Long Term Action Plan.

- e. In 2022, Rajasthan witnessed the deaths of more than 100,000 livestock due to Lumpy Skin Disease. If this disease occurs in wild ungulates, it could create a major depletion in wild prey. To address the threat, the Long Term Action plan will, in the future, build in components for robust surveillance for transmissible animal diseases and establish prophylactic systems in the state.
- f. The Long Term Action Plan will focus on effective communication of its contents and reach out to multiple stakeholders including government departments, civil society and local communities. For this an effective communications strategy will be put together.





## राजस्थान सरकार वन विभाग

कमांकः प0 3(24)वन / 2023 दिनांकः - 20.07.2023 दिनांक:-06.10.2023

प्रधान मुख्य वन संरक्षक एवं मुख्य वन्यजीव प्रतिपालक, राजस्थान, जयपुर।

> विषय:- राज्य में बाघों के बढ़ते हुये कुनबे को देखते हुये एक दीघें कालीन कार्य योजना बनाने हेतु गठित विशेषज्ञ समिति की रिपोर्ट के संबंध में।

> संदर्भ:- आपका पत्रांक एफ.3(133)विकास-1 / मुवजीप्र / 2021 / 459 दिनांक 15.09.2023

महोदय

उपरोक्त विषयान्तर्गत संदर्भित पत्र हारा राज्य में बाघों के बढ़ते हुये कुनवे को देखते हुये एक दीर्घ कालीन कार्य योजना बनाने हेतु प्रस्तुत प्रस्ताव पर इस विभाग की सहपति प्रदान की जाती है।

यह सक्षम स्तर से अनुमोदित है।

भवदीय

(मोनाली सेन) विशेषाधिकारी, वन

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