WILDLIFE TOURISM: A CONSERVATION AND ECONOMIC TOOL @ PANNA TIGER RESERVE

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1. INTRODUCTION

Wildlife Tourism has come a long way, from the perception of tourism as a distraction in our principal job of maintain healthy forest and wildlife population to the belief that it saves wildlife and work as a conservation tool. Wildlife Tourism also works as an Economic tool which invigorate local economy and generate employment. As H S Pabla has noted in his book titled "Road to Nowhere" that "It (tourism) helps in building a conservative-conscious constituency in the public, generates financial and non-financial resources for strengthening conservation, and creates great economic benefits for the society."

Even though we have come out from the mind set of 'phasing out tourism from core/critical tiger habitats of tiger reserve' as desired earlier in NTCA Revised Guidelines Feb 2008, tourism potential is yet to be fully realized in MP.

Till the end of the century, wildlife tourism in MP had remained virtually stagnant. The reason was probably lack of information, awareness or of means etc. Later due to the exposure unleashed by internet and television, wildlife tourism picked up.

In India, wildlife tourism is mostly synonyms with Tiger tourism. Wherever tiger sightings are more, tourists are more. A clear correlation is visible in increase in number of tourists with the increase in tiger numbers in a Tiger Reserve. With the increase in tiger numbers, tiger sightings improve significantly which leads to increase in number of tourists.

In MP more than 10 lakhs tourists visit National Parks and Sanctuaries every year generating more than Rs 30 crores of revenue from gate receipts (entry tickets). There are two classes of Nature-tourism (more commonly known as 'Eco-tourism') namely, wildlife tourism and sight-seeing. Panna Tiger Reserve (PTR) offers both. While PTR Core and Buffer zones offer wildlife tourism, sites like Pandav Fall in Core of PTR and Raneh Fall in Ken-Ghariyal Sanctuary offer sight-seeing. Panna tiger Reserve generated nearly Rs 1.5 crore of revenue (Ticket money) in the year 2020-21, which is expected to grow in future. Let us analyze the tourism scenario in PTR.

2. GROWTH OF TOURISM IN PANNA TIGER RESERVE

Panna Tiger Reserve has seen ups and downs in number of tigers as well as tourists in last two decades. With the local extinction of tiger in 2009, tourism also became extinct from PTR during those times. Management focus, and rightly so, was also not on tourism, but on successful reintroduction of tigers in PTR. With the increase in numbers of tigers after the great success of tiger reintroduction, tourists have returned back to PTR. PTR has opened nearly 17% of its Core area for tourism. There are two entry gates to visit this tourism area, namely Madla gate and Hinota gate. Both entry gates cater to the same area in Core zone. As per the tourism guidelines, tourism inside Core Zone is limited to vehicle Safari between sunrise and sunset at fixed timings. No tourism activities are allowed inside Core Zone during three rainy months i.e. from July to September. With the carrying capacity fixed at 85 vehicles a day, tourism in Core Zone is quite controlled and limiting.

In addition to Core Zone, two Buffer Zones, namely Akola Buffer and Jhinna Buffer have also been opened for tourism. Tourism in Buffer is less restrictive as there is no limit of area which can be opened for tourism purposes. Though timing of visits are fixed for the day,

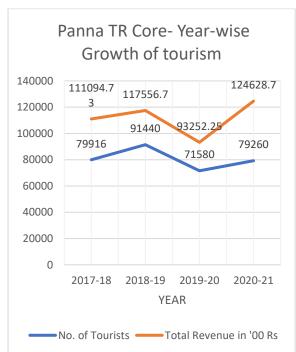
tourism in Buffer is allowed throughout the year. Night Safari (visit during night time up to 9:30 pm in vehicles) is also allowed in both the Buffer Zones. In addition to vehicle safari, other activities like nature trail walks, star gazing etc. which generates interest among visitors can also be organized. Due to the restrictions on the number of safari vehicles entering the Core zone, tourism has now spread and picked up in the Buffer zones of PTR as significant presence of tigers is also there in these Buffer Zones specially in Akola Buffer Zone.

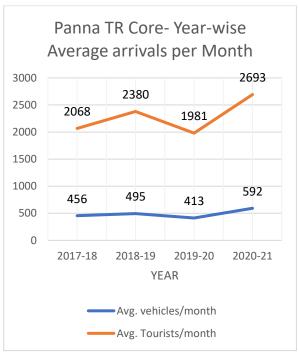
Though tourism year (July to June) 2019-20 and 2020-21 were very difficult periods for any kind of tourism due to COVID, Eco-tourism in PTR got extremely good response whenever curbs on travel are lifted. Let us analyze the tourism growth in PTR in last 4 years.

A. CORE ZONE: Following are the details of total number of tourists and revenue (Ticket money) generated in last 4 years in Core Zone of PTR (includes visit to Pandav Fall):

YEAR	En	Total	
(from July to June)	No. of Tourists	No of Vehicles	Revenue (in Rs)
2017-18	79916	13085	11109473
2018-19	91440	14379	11755670
2019-20*	71580	10928	9325225
2020-21*	79260	14311	12462870

*COVID affected Tourism year





Following results can be drawn from above data:

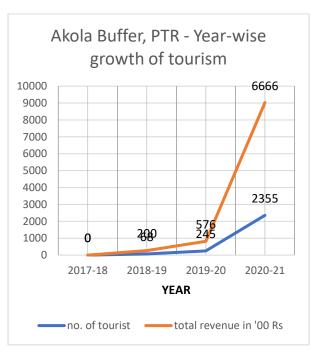
- a. Tourism in Core area of PTR is on growing trajectory.
- b. Even though tourism got badly affected by COVID in year 2019-20 and 2020-21, it has recovered at the end of June 2021 to the pre COVID level.

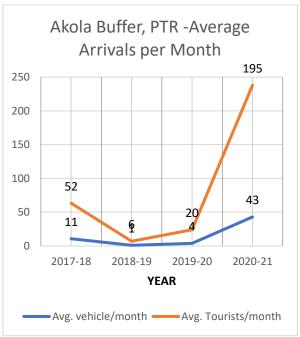
B. BUFFER ZONES: Following are the details of number of tourists and revenue (Ticket money) generated in last 4 years in Buffer area of PTR (visits in Buffer area includes Night Safari also):

(i) AKOLA BUFFER:

YEAR	En	Total		
(from July to June)	No. of Tourists	No of Vehicles	Revenue (in Rs)	
2017-18	0	0	0	
2018-19	68	17	20000	
2019-20*	245	45	57600	
2020-21*	2355	524	666600	

*COVID affected tourism year





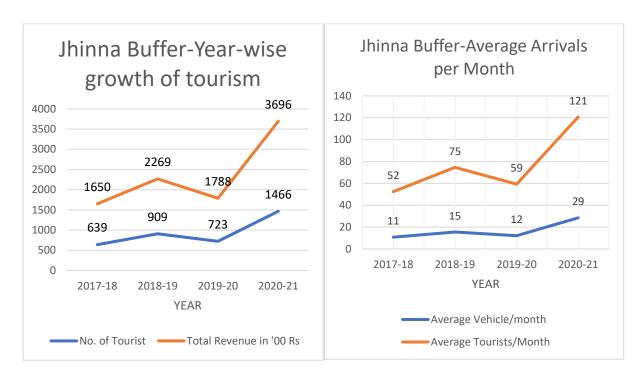
Following results can be drawn from above data:

- a. Tourism in Akola Buffer of PTR is growing exponentially.
- b. Since its inception in 2018-19, tourism has picked up since January 2021 which coincides with greater presence and more visibility of tigers in Akola Buffer.
- c. Even though tourism got badly affected by COVID in the months of April and May, 2021, it has recovered and again picked pace since June 2021.

(ii) JHINNA BUFFER:

YEAR	En	Total	
(from July to June)	No. of Tourists	No of Vehicles	Revenue (in Rs)
2017-18	639	132	165000
2018-19	909	189	226900
2019-20*	723	149	178800
2020-21*	1466	348	369600

*COVID affected tourism year

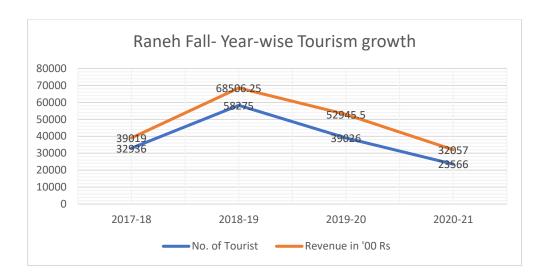


Following results can be drawn from above data:

- a. Tourism in Jhinna Buffer of PTR is continuously growing.
- b. Even though tourism got badly affected by COVID in the year 2019-20 and 2020-21, it has recovered and picked pace since June 2021.
- C. RANEH FALL, KEN GHARIYAL SANCTUARY: This site mainly offers sight-seeing at Raneh Fall.

YEAR	En	Total	
(from July to June)	No. of Tourists	No of Vehicles	Revenue (in Rs)
2017-18	32936	8427	3901875
2018-19	58275	12586	6850625
2019-20*	39026	10160	5294550
2020-21*	23566	6092	3205700

^{*}COVID affected tourism year



Above data shows that tourism in Raneh Fall, Ken Ghariyal Sanctuary is yet to recover from COVID shock. Tourism got badly affected by COVID in the year 2019-20 and 2020-21 and has not picked pace.

3. ECONOMIC IMPACT OF WILDLIFE TOURISM IN PTR

Normally impact of Eco-tourism is evaluated on 3 aspects:

- (i) Economic Impact
- (ii) Socio-cultural Impact
- (iii) Ecological Impact

Socio-cultural impacts of tourism include the changes brought about in the lives of the local population, their culture, arts, customs and rituals and traditional lifestyles. In this article, we will focus mainly on economic impacts of wildlife tourism in the region.

Protected areas are under increasing pressure to provide economic justification for their existence, particularly in highly forested districts like Panna where demand of land for other developmental activities, livestock and forest based natural resources is very high. Nature-based tourism is increasing due to increased earnings of middle class society. Eco-tourism offers a mechanism to generate substantial benefits from Protected Areas for both Governments on one hand and local communities on the other, and is increasingly promoted as a sustainable use of Protected Areas (Goodwin, 2010).

The most direct economic impact of Eco-tourism on local communities is in the form of job creation either in the tourism industry or in ancillary services. The staff hired by the tourism industry for housekeeping, cleaning, cooking, guiding, driving, etc. is usually local. Growth in tourism has created opportunities for local people to set up small businesses such as tea shops, local foods, handicrafts, motor repairs, and so on. Homestays can be started.

Following is the revenue (Ticket money) generated in past four years in different tourism zones of PTR:

YEAR	Revenue (in Rs)				
(from July to June)			JHINNA BUFFER	RANEH FALL	TOTAL
2017-18	11109473	0	165000	3901875	15176348
2018-19	11755670	20000	226900	6850625	18853195
2019-20*	9325225	57600	178800	5294550	14856175
2020-21*	12462870	666600	369600	3205700	16704770

Though total revenue seems to have affected by COVID during year 2019-20 and 2020-21, revenue generation in Core and Buffer zones of PTR is on upswing now. The fall in revenue is mainly in Raneh Fall Eco-tourism site where footfall has been affected by less tourists coming to Khazuraho. In rest of the Eco-tourism sites of PTR, tourism has picked up despite COVID travel restriction. In the business of Eco-tourism, vehicle drivers/owners, guides and hoteliers are direct service provider. In PTR, 58 Zypsy and 91 Guides (63 in Core & 28 Buffer) are registered for the purpose of Eco-tourism. Most of the Zypsy owners, all the drivers and guides are from the villages situated at the periphery of PTR. There are 17 lodges at Madla within the 5 km radius of the PTR, one lodge at Akola, and 2-3 hotels in Panna city, catering to the needs of tourists coming for Eco-tourism in PTR. 70-80% of the staff working in lodges is local. Lodges also procure their groceries, vegetables, milk etc. from local area only.

The tourists can be divided into three strata named as budget, premium, and luxury depending on their accommodation expenses. Like tourists, hotels can also be divided into three strata named as budget, premium, and luxury, depending on their average tariff/night. The tourists who stayed in the hotels ranging below INR 5,000/ night tariff are normally considered as budget tourists; those staying in the hotels ranging from INR 5,000-12,000/night tariff are considered as premium tourists and those staying in the hotels ranging above INR 12,000/night tariff are considered as luxury tourists.

A study conducted in Satpura Tiger Reserve in 2017 ("Protected areas, tourism economy and employment generation: A case study from India" by Shweta Sharma, Shamli Sood, Pradeep Chaudhry) calculated that the average expenditure per entry incurred by budget tourist, premium tourist and luxury tourist was INR 2112, INR 3421 and INR 9566 respectively in addition to hotel charges and travelling charges to the destination. In 2017, total money to be spent on compulsory items (Ticket charge, Zypsy charge and Guide charge) per tourist was around INR 600 as fixed by MP government. Subtracting this amount from average amount spent by budget, premium and luxury tourist per entry in year 2017 was the amount spent by tourist on other items like food, souvenir purchase etc. Following table gives details of money spent on other items at 2017 prices and at 2020 prices considering 4% price rise annually:

Kind of Tourist	Compulsory Charges (in Rs)	Money spent by per tourist per entry (in Rs)	Money spent on other than Compulsory Charge (in Rs) (year 2017 prices) (col 3-col 2)	Money spent on other than Compulsory Charge (in Rs) (year 2020 prices)*
1	2	3	4	5
BUDGET		2112	1512	1700
PREMIUM	600	3421	2821	3173
LUXURY		9566	8966	10085

^{*4%} rise in prices per year has been taken to do the calculation.

Taking these data for PTR and considering 70% of the tourist as Budget tourists, 25% as premium tourists and rest 5% as luxury tourists, following table given information about approximate amount spent by a tourist in PTR in year 2020-21:

Kind of Tourist	No. of tourists	Money spent on other than Compulsory Charge (in Rs)	Total Amount Spent other than Compulsory Charges (in Rs)
BUDGET	62310	1700	105977773
PREMIUM	20770	3173	65909016
LUXURY	4154	10085	41895798
Total			213782587

Above calculation shows that in addition to collection of INR 1.67 crore as Ticket money, an economy of around INR 21 crore is generated every year by ecotourism in PTR. This is exclusive of hotel rent paid by tourists. In terms of man-days generated, more than 5 lakhs man-days are generated per year considering INR 400 as daily wages. Considering 300 days of work for a permanent daily wager/worker in a year, nearly 1800 people/families from at least 8 villages at the periphery, are permanently employed in tourism business generated by Eco-tourism in PTR. This is in addition to more than 700 daily wagers employed from local villages by PTR management for protection works. Due to this huge employment generation from Eco-tourism and management works in PTR, in the villages which are sharing the burden of protecting forest and wildlife, there isn't much animosity seen among locals, forest department and wildlife.

Madhya Pradesh government has allowed the Tiger Reserves to retain all their tourism revenues for local use. Ticket money collected in PTR is deposited in the 'Vikas Nidhi' account of PTR. 30% of the Vikas Nidhi amount is distributed among Eco Development Committees (EDCs) situated in the buffer zones of tiger reserves which is spent by EDCs in different community welfare schemes and developmental activities in the village. Rest of the amount is spent on improving tourism facilities along with different protection and management works done in PTR. Hence the Ticket money also gets circulated in the local economy in this way, a further boost to employment and local economy.

4. FUTURE STRATEGIES:

The potential role of tourism in contributing towards the costs of conservation and providing economic opportunities for communities living adjacent to natural heritage has long been recognized. There is now a realization amongst Park managers and other stake holders and public in general that there is no negative relationship between the growth of tourism and tiger numbers. Interestingly, tourism zones in all tiger reserves are having good numbers of tigers. NTCA has also highlighted the fact in its latest guidelines announcing that Eco-tourism "can help to contribute directly to the protection of wildlife or forest areas, while making the local community stakeholders and owners in the process".

As per the NTCA guidelines for tourism in Core areas of Tiger Reserve, two conditions have been imposed:

- (i) cap on maximum area which can be opened up for tourism at 20% of the Core area or at the existing level whichever is lower;
- (ii) maximum intake of tourist based on carrying capacity of the Reserve,

The three Tiger Reserve (Kanha, Pench and Bandhavgarh) of MP which are running at the full carrying capacity in the Core area, leaves very little room for any increase in tourist volume in Core area. PTR is still in its growth phase and yet to reach its full carrying capacity of tourism in Core area. Also tourism in Buffer areas is not limiting and hold great potential

for growth. Akola Buffer zone has high density of tigers and at times, sightings are better than Core zones. Jhinna Buffer zone has many scenic spots along with high presence of Sloth Bear and leopard. Night safari in these two Buffer zones attracts lots of tourist. Star gazing in nights from watch towers, walking trail, patrolling with staff etc. are some of the activities which are in the process of implementation in Buffer Zones.

With the combined efforts of PTR authorities and other stake holders, tourism in Panna is bound to increase. With increasing tourism, new challenges will crop up. There will be urgent need to build the capacities of local communities to garner the jobs created by tourism and produce goods required by visitors and the service industry. Ill effects of tourism like garbage, overcrowding, pressure on forests for fuel wood, wear and tear of roads and other infrastructure etc. will need to be tackled in a planned way.

The economic value of tourism and the distribution of its benefits to the local population are estimated in terms of the number of visitors, tourism revenue generated through park fee, hotel occupancy, number of jobs created for locals in the hospitality business etc. The estimates of benefits to the local population are based on the understanding that all tourism income stays within the local economy, thus overlooking the possibility of leakages. However, there is also ample evidence of gains from wildlife tourism being siphoned off by larger tourism establishments and the middlemen. The local population, with their limited economic resources and scant knowledge of the recreational industry, usually find it challenging to exploit Tiger Reserve development and wildlife tourism to their advantage. Study done in Satpura Tiger Reserve (STR) as mentioned above states that "more than 50% of revenue generated from tourism in STR is retained by hotels, resorts, and lodges located in the vicinity of tourism zones. So, a major portion of the revenue is grabbed by the hotel owners and staff employed at top level, most of which were outsiders. This prevents local people from deriving substantial benefits from tourism activities, often marginalizing them due to minimal financial benefits". It is true that the tiger tourism was started with the prime motive of providing livelihood to nearby villagers and lifting their status so as to gain their support in managing the Reserve. Park managers always need to keep this objective in mind so that the local residents are not marginalised.

PS: Akola Buffer keeps on surprising PTR. Number of tourists coming to Akola Buffer during the rainy season of July, August and September 2021, exceeded our expectation. Efforts put in last few years are bearing fruit now. Number of tigers (adult and Sub-adult) in this area has gone up to 7 along with 7 cubs. All the guides engaged for Eco-tourism here, are from the peripheral villages which has led to locals joining in protection of the area and ensuring that no harm is done to the tigers and other wildlife present in the area. Following is the details of monthly tourist data from July to September 2021:

YEAR	En	Total		
2021	No. of Tourists	No of Vehicles	Revenue (in Rs)	
July	1785	404	530100	
Aug	1705	378	464250	
Sep	742	176	232650	
TOTAL	4232	958	1227000	

Data and field reality show tremendous increase in tourism in Akola Buffer resulting in increase in local economy. It presents a case study that how Eco-tourism may become a conservation tool creating win-win situation for all stakeholders. Way to go!
