

CRITICAL APPRAISAL OF VARIOUS TOURISM DEVELOPMENT PLANS AND FORMULATION OF PERSPECTIVE PLAN FOR SANCTUARIES

The Case of Ratanpani And Singhori Wildlife Sanctuaries

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ABSTRACT –

In the present study, an attempt was made to investigate the prospects and potentials of sustainable tourism in Madhya Pradesh sanctuaries with special reference to biodiversity conservation of protected areas. The study was conducted in the year 2019-2020. The study sites were located in ratanpani-singhori sanctuaries. (Obaidullaganj Forest Division, Bhopal) – a larger unit of Protected Area and singhori Wildlife Sanctuary (Raisen Forest Division, Bhopal) – a smaller unit of Protected Area. The study themes included the study of ecotourism activities being carried out in both the protected areas. The documentation of flora and fauna at both the protected areas was done. The flora documentation was carried out through phytosociological study, the collection of unidentified species, their identification and fauna documentation were done from records available with the forest department and self-visits. The impacts of ecotourism on the sustainable livelihood of local inhabitants were studied. The infrastructure and facilities available in the protected areas for the promotion of ecotourism were studied. The infrastructure at both the sites needs to be increased however the facilities need much improvement at singhori Wildlife Sanctuary. The phytosociological analysis revealed that biotic and abiotic factors were responsible for composition and diversity of the forests. The values of various vegetation layers of ratanpani-singhori Biosphere Reserve showed the diversity of plants at singhori Wildlife Sanctuary was more. The forest at ratanpani Wildlife Sanctuary is less disturbed. The awareness among the local inhabitants was documented by a purposive selection of respondents, and it was found that there is very less awareness among them and there is need of awareness programmers, then only the forest department can get full cooperation from the local inhabitants. From these observations, it is evident that as a result of the opportunities for sustainable development have

increased in the state. Tourism being one of the rapidly developing industries, through ecotourism has opened the ways for the hand-clumped development of the state as well as the inhabitants of the forest villages. The conservative approach of ecotourism has raised its value. But there is need to create awareness among the local people about ecotourism and how they can be benefited from it, as without knowledge it is not possible for the local people to accept the policies of ecotourism.

Key Words:faunal biodiversity, floral biodiversity, nature conservancy, reserveforest, wildlife sanctuary

1.INTRODUCTION

In order to minimize the impact of urbanization &Infrastructure development & eco sensitive development activities, areas adjacent to the protected areas (National Parks, Sanctuaries) have been declared as Eco-Sensitive Zones (ESZs). These zones are notified by Ministry of Environment, Forest & Climate change (MoEFCC). The purpose of declaring ESZs is to create “shock absorbers” to the protected areas by regulating & managing activities around them. They also act as transition zone from areas of high protection to areas of low protection. ESZs are regulated by Central Government through MoEFCC, who came out with new guidelines for regulation of such areas in 2011. Development of tourism with public, private partnership in sustainable manner, investor facilitation, skill-development, publicity/promotion of tourist destinations nationally & internationally, identification and development of tourism infrastructure are the core objective of the Board

2. AIMS AND OBJECTIVES

The aim of this paper is to study the concept of perspective plan for Sustainable Tourism Development Plan of National parks & Sanctuaries. Objectives of the study are to identify the importance existing tourism potential of the region and to prepare sustainable

tourism management plan for Ratapani and Singhori sanctuary for 2040.

3. SCOPE AND LIMITATION:

The study shall incorporate existing infrastructure proposals of the region. The study shall not cover ongoing deforestation activities of the region. Preparation of Tourism master plan incorporating existing situational analysis, Proposals for development of eco-tourism sites etc. Preparation of Tourism Management Plan and Prepare of guidelines for eco-tourism, develop written material for awareness impact and good practices. Identification of growth center for eco-tourism and policy on local involvement in eco-tourism.

4. METHODOLOGY

This paper is based on secondary sources of information. There have been changes in the boundary of MPTB during the two plan periods. Apart from that the sub-regions of MPTB were also reclassified at that time. Built-up area: residential, commercial, and institutional. Perspective Plan is collection of relevant information and data. site visit to Ratapani National Park & Singhori Wildlife Sanctuary to appreciate site potential/site constraints, existing natural features like watercourse, water bodies, existing utilities on site, present development on site, site and surrounding areas, adjacent development, accessibility and connectivity to the site etc.

The Primary survey for villages under Eco-Sensitive have to be understand the existing situation of village, the facilities available, etc.

The Tourist Destination Survey was designed to get the detail understanding about the Tourist Spot. This Survey had the details of infrastructure available at the tourist spot, the way to reach the destination and tourist details, Tourist Survey, Surveys Designed for Hotel Owners -In order to go to any tourist destination, it is must to know the lodging and boarding facilities along with the restaurants available in vicinity. To understand the trend of hotels in and around the Wildlife Sanctuaries and their Eco-Sensitive Zone the survey form for hotel details from their owners

- Industrial.
- Agricultural.
- Forest: dense forest, sparse forest, scrubs land.
- Wet land.
- Water bodies

5. DATA AND SOURCES

The data for this study have been obtained from the following secondary sources.

1. Draft of Forest Department Government of Madhya Pradesh Bhopal
2. Draft of Environmental Protection Act 1986.
3. Biological Diversity Act 2002
4. Census of India, 1971 through 2001,2011.

6. PERSPECTIVE PLAN: CONCEPT

Perspective planning is a blueprint regarding the objectives and targets of long run growth. The perspective plan is not just a plan, rather to attain certain objectives and targets; the perspective plan is divided into certain smaller plans. A Perspective Plan is a long term (20-25 years) written document supported by necessary maps and diagrams providing the state government the goals, policies, strategies and general programmes of the urban local authority regarding socio-economic development of the settlement under its governance. The basic purpose of a perspective plan is to provide a policy framework for further detailing and it serves as a guide for urban local authority in preparation of the development plan.

7. PERSPECTIVE PLAN: SCOPE AND PURPOSE

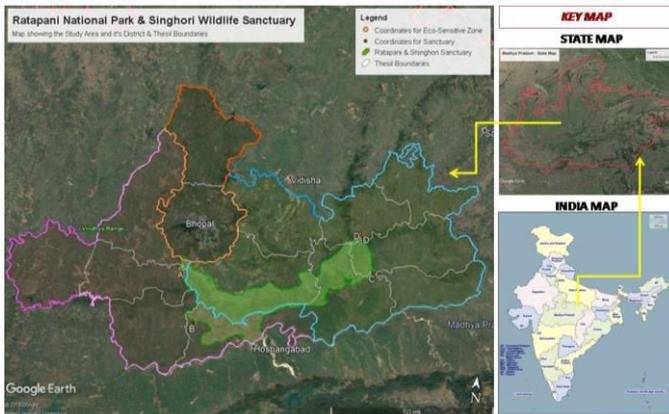
Developing a vision for region is essential for policy framework. The vision stipulates direction of growth and identification of resource potential and innovations to be adopted for the thrust areas of development. It integrates broad level plan with the regional or development plan. A realistic vision helps policy formulation and preparation of Perspective plan.

Perspective plan defines the vision and focuses on the spatio-economic development policies, strategies and programmes towards the intended development of the State. The Perspective Plan of a State could include - Environmental Protection Act 1986. The plan is based on state resource mapping and analysis and assessment of potential resources. It addresses the long-term policies regarding development of infrastructure and resource mobilisation. The scope of this plan covers the social, economic, environmental and spatial development goals, policies and priorities relating to the activities that have spatial and financial implications. It also covers long-term policies regarding development of infrastructure and resource mobilization that are necessary to promote these urban activities. Great care is always taken in this plan to minimize the conflict between the environmental protection and urban development. The purpose of a perspective plan is to provide an overall framework for preparation of detailed

plans. Therefore, it serves as a guide for urban local authorities and regional development authorities in preparation of the regional and development plans.

8.STUDY AREA - Ratapani & singhori wildlife sanctuary

Ratapani & singhori Wildlife Sanctuary spreads over an area of 1201.29 km² is located in Raisen District in the State of Madhya Pradesh. Ratapani Wildlife Sanctuary is extremely rich in flora and fauna and harbours a number of endemic species. Ratapani Wildlife Sanctuary is rich in biodiversity. These wildlife areas are classified into semi-arid wildlife zone - IV B Gujarat Rajputana under Roger and Pawar classification. The sanctuary is



inhabited by all the usual animals of the region, such as tiger (*Panthera tigris*) leopard (*Panthera pardus*), wolf (*Canis lupus*), Jackal (*Canis aureus*), Indian fox (*Vulpes bengalensis*), Striped hyena (*Hyaena hyaena*) Sloth bear (*Melursus ursinus*) among carnivores and spotted deer (*Axis axis*), Sambhar (*Cervus unicolor*) and blackbuck (*Antelope cervicapra*), amongst herbivores. Apart from these, crocodiles/gharials can also be seen in Ratapani Wildlife Sanctuary. Ratapani Wildlife Sanctuary



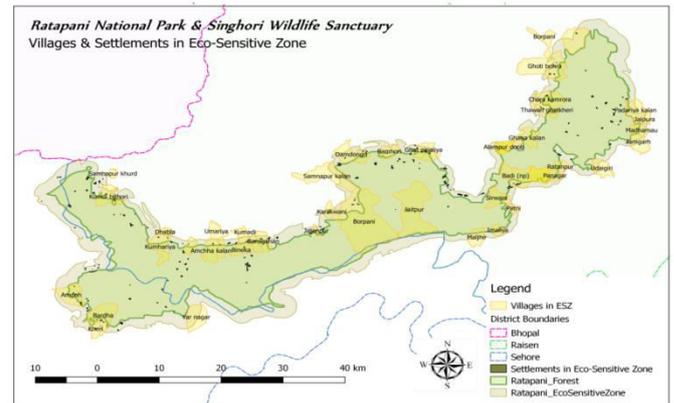
contains 129 tree species, 73 herbs and shrubs species, 33 climbers and parasites, 35 grasses and bamboo

species, 35 mammals, 205 birds, 14 fish, 33 reptiles and 10 species of amphibians have been recorded in Ratapani Wildlife Sanctuary (Table 1& Table 2).

Figure 1: connectivity map

Table 1 Coordinates for Ratapani Wildlife Sanctuary

Corners	Latitude (N)	Longitude (E)
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A	23° 2' 21.742"	77° 20' 9.817"
B	22° 48' 58.759"	77° 25' 39.132"
C	23° 8' 30.593"	78° 16' 31.158"
D	23° 17' 47.545"	78° 12' 19.342"

figure 2: village map in ec0-sensitive area

Table 2 Coordinates for Eco Sensitive Zone of Ratapani Wildlife Sanctuary

Corners	Latitude (N)	Longitude (E)
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A	23° 2' 12.670"	77° 19' 2.020"
B	22° 48' 24.792"	77° 25' 38.686"
C	23° 8' 28.575"	78° 17' 7.044"
D	23° 18' 53.787"	78° 12' 43.135"

It is necessary to conserve and protect the area to the extent and boundaries of which is specified in paragraph 1 of this

notification, around the protected area of Ratapani Wildlife Sanctuary as Eco-sensitive zone from ecological, environmental and biodiversity point of view and to prohibit industries or class of industries and their operations and processes in the said Eco-sensitive Zone.

Extent and boundaries of eco-sensitive zone: The extent of Eco-sensitive Zone is one kilometer in the revenue area and two kilometer in the surrounding forest area from the boundary of Ratapani Wildlife Sanctuary. The area of Eco sensitive Zone is 546.52 km² which has 72 villages

Activities prohibited or to be regulated within the Eco-sensitive Zone

All activities in the Eco sensitive Zone shall be governed by the provisions of the Environment (Protection) Act, 1986 (29 of 1986) and the rules made there under including the Coastal Regulation Zone (CRZ), 2011 and the Environmental Impact Assessment (EIA) Notification, 2006 and other applicable laws including the Forest (Conservation) Act, 1980 (69 of 1980), the Indian Forest Act, 1927 (16 of 1927), the Wildlife (Protection) Act 1972 (53 of 1972), and amendments made thereto and be regulated in the manner specified.

9. PROHIBITED ACTIVATES IN ECO SENSITIVE ZONE

a) Commercial mining: All new and existing (minor and majormineras), stone quarrying and crushing units are prohibited with immediate effect except for meeting the domestic needs of bona fide local residents including digging of earth for construction or repair of houses and for manufacture of country tiles or bricks for housing and for other activities. The mining operations shall be carried out in accordance with the order of the Hon’ble Supreme Court dated 4th August, 2006 in the matter of T.N. Godavarman Thirumulpad vs. UOI in W.P.(C) No.202 of 1995 and dated 21.04.2014 in the matter of Goa Foundation Vs. UOI in W.P.(C) No.435 of 2012

b) Setting of industries causing pollution (water, air, soil, noise, etc.): No new industries and expansion of existing polluting industries in the Eco-sensitive zone shall be permitted. Only non-polluting industries shall be allowed within ESZ as per classification of Industries in the Guidelines issued by Central Pollution Control Board in February 2016, unless so specified in this notification. In addition, non-polluting cottage industries shall be promoted.

c) Establishment of major hydroelectric project: Prohibited (exceptas otherwise provided) as per applicable laws.

d) Use or production or processing of any hazardous substances: Prohibited (except as otherwise provided) as per applicable laws:

e) Discharge of untreated effluents in natural water bodies or land area: Prohibited (except as otherwise provided) as per applicable laws:

f) Setting of new saw mills: No new or expansion of existing saw millshall be permitted within the Eco-sensitive Zone.

g) Setting up of brick kilns: Prohibited (except as otherwise provided)as per applicable laws.

h) Use of polythene bags: Prohibited (except as otherwise provided) asper applicable laws.

i) Commercial use of firewood: Prohibited (except as otherwiseprovided) as per applicable laws.

j) Newwood-based industry: Prohibited (except as otherwise provided)as per applicable laws.

k) Fishing: Prohibited (except as otherwise provided) as per applicablelaws.

10.FAUNAL BIODIVERSITY OF STUDY AREA

For the documentation of the faunal biodiversity of the study area with respect to birds, reptiles, amphibians, and butterfly species, a baseline survey had been conducted.

Birds: The sighting of bird species was very lass during the studyperiod. The most commonly spotted bird species of this area were Eurasian Collared-Dove, Cattle Egret, Red-wattled Lapwing, Intermediate Egret, Rock Pigeon, Chestnut-headed Bee-eater, Bank Myna and Common Myna. Water birds are common near to Ratapani Lake. The Indian Peafowl was observed which is listed as schedule –I as per IWPA, 1972 and others listed as schedule IV as per IWPA, 1972.

Total 1,224 bird species reliably recorded from India, together with their status categories. In total there are 1219 extant native species including migrants and vagrants (but excluding 3 species now known to be extinct in the country and 2 introduced species). There are 923 breeding species (911 residents, plus 12 suspected residents). IUCN evaluated 1254 bird species from India and categorized 77 species as threatened (13 species as critically endangered, 10 species as Endangered and 54 species as Vulnerable). No one sighted birds were evaluated as near threatened by IUCN25 and Bird Life International.15 A taxon is Near Threatened, when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable categories, but is close to qualifying or is likely to qualify for a threatened category in the near future. List of schedules -1 as per Wild life Protection Act 1972, species is given in the Table 3. Systematic account of the birds in the study area with the status of occurrence

Table 3 Schedule –I Bird(s) of Study Area

Species	As IWPA 1972 IUCN	CITES
Indian Peafowl (Pavo	Schedule I; PartLeast	Not listed

origin site, Kari Mahadev, Ranbhavana Chittori & Imlana's Tiger area. It can have 1000 Tourist at a time.

Typology of tourist destination,

I. Tourist count during lean /peak seasons,

II. Local festive days,

Tourism infrastructure in place

The sites were categorized as per the typology of the tourist destination. Three basic typologies are identified viz. Heritage, Leisure and Religious. The Heritage typology includes the Historical places, forts, archaeologically important sites, sites under ASI and those depicting the local culture and values. Leisure sites include the sites that have natural ambiance, scenic beauty, Forest, wildlife sanctuaries as well as dams, lakes, gardens, zoos and the places where people are promoted for leisure activities. Religious sites are the ones having religious values attached to them. They include temples, mosques, Dargah, Vihars etc.

Objective of Analysis

- Improve the tourist flow in the region
- Hold the tourists in the circuit, which will lead to
- socio-economic development of the region

The methodology used for selection of the sites is as follows

- Identification of parameters to be considered for rating of the sites.
- Rating of all the sites on these predetermined parameters.
- Mapping on Tourism Potential Matrix

Parameters for site selection

It is often considered that tourism brings in high returns with low investments. However, it implies only in situations where excellent roads, beautifully landscaped urban environs, reliable power & water supply, sanitation and solid waste disposal systems, etc., are already in place. This emphasizes the need for sufficient amount of tourist infrastructure without overlooking any costs.

The level of physical and social infrastructure available at each tourist destination plays a significant role in attracting the number of tourists to a destination. Following infrastructure provisions were analysed to study the tourism potential of the destination.

Selection of Potential Destinations by MATRIX

All the sites cannot be developed to the same level, as this would dilute the development efforts. Hence it is important to select sites with the maximum potential for development from the local, national and international perspective. I had determined parameters for the selection of potential sites for development. These parameters are listed below:

- Connectivity to the destination
- Cleanliness at the destination
- Facilities at the destination
- Site potential of the destination
- Tourist flow at the destination



Based on the prior experience in site selection, Consultants assigned a rating to each of these parameters. The score denotes the importance of each parameter in determining the success of any site as a tourist destination. Accordingly, the rating assigned to each of these parameters is as follows:

Year	Ratapani National Park		Shinghori Wildlife Sanctuary	Bhimbetaka Rock Shelter Caves	
	Indian	Foreign	Total	Indian	Foreign
2011	58265	1955			
2012	61117	1797			
2013	59924	1650			
2014	70236	2056		65689	1873
2015	76139	1921		64384	2125
2016	69488	1889		75062	1978
2017	74175	467	84	58130	1578
2018	69510	1248	305	67222	2341
2019	66789	1342	175	56782	1790

Connectivity	10%
Cleanliness	5%
Facilities	20%
Site Potential	40%
Tourist Flow	25%

Figure 3: Tourist flow map

13. MAPPING

The standardized scores obtained, are plotted on the Tourism Potential Matrix. The Site Infrastructure is marked on horizontal X axis whereas; Site Potential scores are marked on the vertical Y axis. An approximate position of each of the above destination is obtained by placing both the scores on the grid. The intersection, gives us an indication of the position of the destination in the relevant quadrant.

Quadrant 1

(Good Site potential + Good Site infrastructure), reveals the destinations with good site infrastructure and high site potential. These destinations are popular among the tourists and measures should be taken to maintain the tourist flow and meet the needs of infrastructure.

Quadrant 2

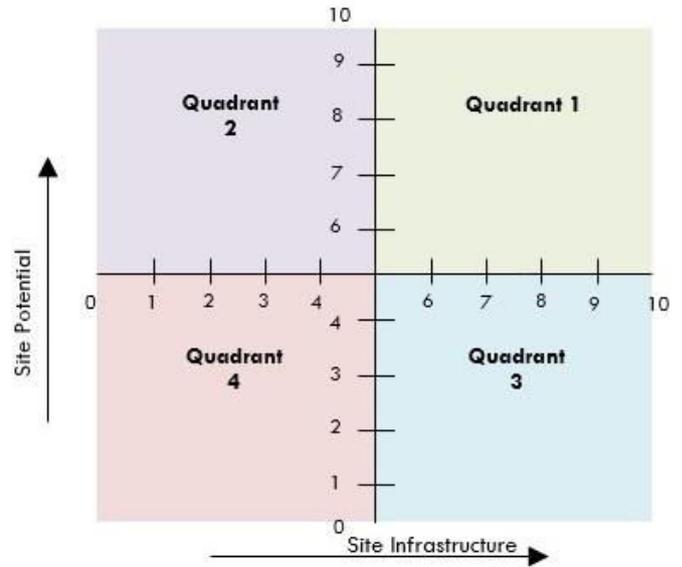
(Good Site potential + Poor Site infrastructure), highlights the places with low site infrastructure and high site potential. These destinations have high visitations, but they lack the basic infrastructure. Efforts shall be taken to provide the necessary infrastructure, as per tourists' needs.

Quadrant 3

(Poor Site potential + Good Site infrastructure), showcases the destinations with good level of infrastructure but poor site potential. These destinations need wide scale publicity. More activities need to be proposed at these places, to increase and retain the tourists in the region.

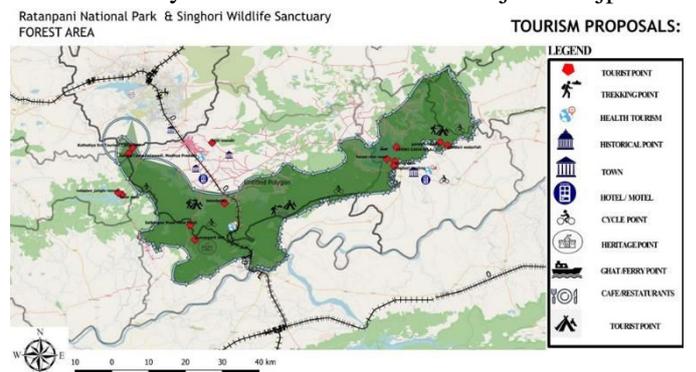
Quadrant 4

(Poor Site potential + Poor Site infrastructure), reveals the destinations which lack inherent attractions. They have poor infrastructure as well as poor site potential. These destinations require high level of development and will require more time to attract tourists



RECOMMENDATIONS AND CONCLUSION

The study area is ecologically sensitive having protected and reserved forest and notified wildlife sanctuary. The railroad track is going through Ratapani Wildlife Sanctuary which has rich biodiversity and imperiled species. These untamed life regions are grouped into semi-bone-dry natural life zone-IVB Gujarat Rajputana



under Roger and Pauer order. The asylum is occupied by all the typical creatures of the locale, for example, tiger (*Panthera Tigris*) panther (*Panthera pardus*), wolf (*Canis lupus*), Jackal (*Canis aureus*), Indian fox (*Vulpes bengalensis*), Striped hyena (*hyaena*) Sloth bear (*Melursus ursinus*) among carnivores and spotted deer Ratanpani National Park & Singhori Wildlife Sanctuary



(Axis pivot), Sambhar (*Cervus unicolor*), Nilgai (*Boselaphus tragocamelus*), Chinkara (*Gazella bennetti*),

Wild pig (*Sus scrofa*), Chow Singha (*Tetracerus quadricornis*) and Blackbuck (*Antelope cervicapra*), among herbivores. Aside from these, crocodiles/gharials can likewise be seen in Ratapani Wildlife Sanctuary. Ratapani Wildlife Sanctuary contains 129 tree species, 73 spices and bushes species, 33 climbers and parasites, 35 grasses and bamboo species, 35 warm blooded animals, 205 feathered creatures, 14 fish, 33 reptiles and 10 types of creatures of land and water have been recorded in Ratapani Wildlife Sanctuary.

The Study of infrastructure survey carried out reveals that lack of water supply is a major concern due to which tourist refrain from visiting the place. It was followed by the lack of toilet facilities, adequate resting benches, lack of garbage bins, etc. respectively. The tourism typology of these destinations revealed that 2 destinations are historical and heritage places, 5 locations are eco-tourism spots, 6-7 locations are religious places offering additional tourist activity at the destination whereas remaining 9 destinations offer a blend of either of these tourisms together. Various promotion tools shall be used to enhance District Tourism like SMS alters, FM Radio, Websites, Brochures, Press Media, Signages, Fairs and Festivals, etc. Vocational training shall be imparted to various stakeholders like tour operators, taxi operators, hoteliers, and guides, personnel in the hotel and catering services to create a sense of belongingness. Budget Provision shall be classified under the Central Government, Financial help from Tourism, Urban Development, Forest Department of the Central Govt., Municipal Councils and Gram panchayats according to the scale of the project



It is firmly prescribed to set up the preservation plan for plan - 1 Fauna (recorded 9 creatures and 1 fowl) and it is guarantee to actualize the protection plan during development and activity period of railroad track. Additionally, there is a dire need of open mindfulness for the significance of natural life, as unlawful chasing, murdering or catching of wild creatures was recorded from local people living in the backwoods and close by residents. Individuals originating from outside are giving the ravenousness of cash and other important arrangement to townspeople for chasing. It's an ecological wrongdoing against the common assets

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