

PROVIDE INSIGHTS FOR **TELANGANA GOVERNMENT TOURISM DEPARTMENT**

DOMAIN: TOURISM

FUNCTION: REVENUE / MUNICIPAL ADMINISTRATION

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OBJECTIVE

PRELIMINARY QUESTIONS

SECONDARY QUESTIONS

FURTHER SECONDARY RESEARCH QUESTIONS

RECOMMENDATION TO GOVERNMENT

AGENDA





OBJECTIVE

TELANGANA IS ONE OF INDIA'S LEADING STATES AND HAS PUBLISHED ITS TOURISM DATA UNDER ITS OPEN DATA POLICY.

- The basic objective of this project is to provide insights to the Telangana for the given data, which can be used to increase tourism of the state and develop the under-developed districts.
- Find the patterns in the given data, do additional research, and give data-informed recommendations to the Telangana government which can be used to increase their revenue by improving administrative operations.







RESEARCH QUESTIONS

PRELIMINARY RESEARCH QUESTIONS



Provide Insights For Telangana Government Tourism Department

Preliminary Research Questions: (Answers can be found directly from the given data)

- List down the top 10 districts that have the highest number of domestic visitors overall (2016 - 2019)?
 (Insight: Get an overview of districts that are doing well)
- List down the top 3 districts based on compounded annual growth rate (CAGR) of visitors between (2016 - 2019)? (Insight: Districts that are growing)
- List down the bottom 3 districts based on compounded annual growth rate (CAGR) of visitors between (2016 - 2019)? (Insight: Districts that are declining)
- 4. What are the peak and low season months for Hyderabad based on the data from 2016 to 2019 for Hyderabad district? (Insight: Government can plan well for the peak seasons and boost low seasons by introducing new events)
- Show the top & bottom 3 districts with high domestic to foreign tourist ratio?
- (Insight: Government can learn from top districts and replicate the same to bottom districts which can improve the foreign visitors as foreign visitors will bring more revenue)

SECONDARY RESEARCH QUESTIONS



Secondary Research Questions: (Need to do research and get additional data)

- List the top & bottom 5 districts based on 'population to tourist footfall ratio" ratio in 2019? (* ratio: Total Visitors / Total Residents Population in the given year)
- (Insight: Find the bottom districts and create a plan to accommodate more tourists)
- 7. What will be the projected number of domestic and foreign tourists in Hyderabad in 2025 based on the growth rate from previous years?
- (Insight: Better estimate of incoming tourists count so that government can plan the infrastructure better)
- Estimate the projected revenue for Hyderabad in 2025 based on average spend per tourist (approximate data)



Tourist	Average Revenue		
Foreign Tourist	₹	5,600.00	
Domestic Tourist	₹	1,200.00	

Suggested areas for further secondary research to get more insights: Crime rate, Cleanliness Ratings, Infrastructure Development Ratings etc.

RECOMMENDATIONS TO GOVT.





- Districts with highest potential
 - a. Which districts has the highest potential for tourism growth and what actions government can take?
- Cultural / Corporate Events to boost tourism
 - a. What kind of events the government can conduct?
 - b. Which month(s)?
 - c. Which districts?
- Dubai has made itself a business hub and enjoys massive business tourism. Can Hyderabad emulate the Dubai model? Provide insights based on your research.
- Provide all other recommendations that can boost the telangana tourism, particularly Hyderabad.

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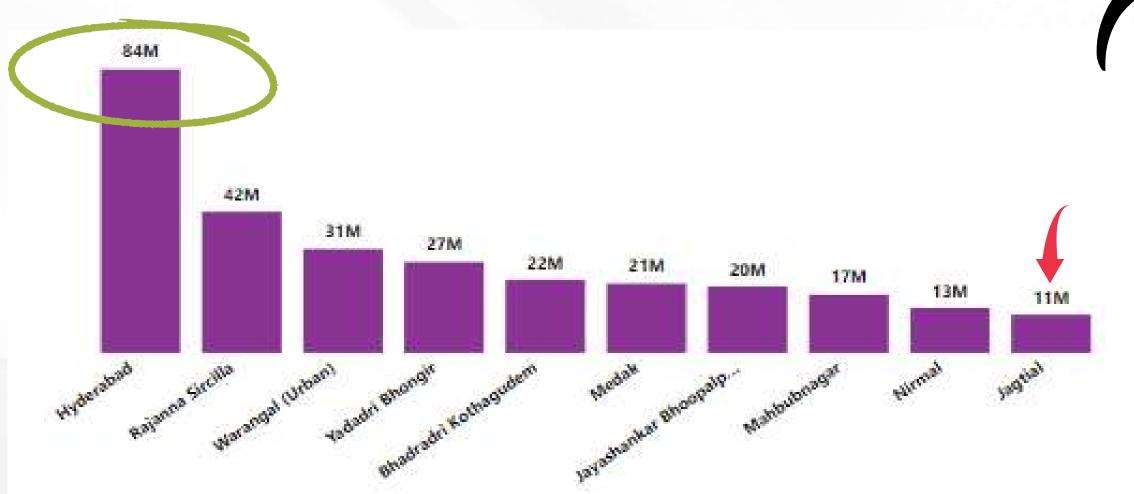


Preliminary Research Questions





List down the top 10 districts that have the highest number of domestic visitors overall (2016-2019).



District	Domestic_visitors
Hyderabad	29.2%
Rajanna Sircilla	14.6%
Warangal (Urban)	10.7%
Yadadri Bhongir	9.4%
Bhadradri Kothagudem	7.5%
Medak	7.2%
Jayashankar Bhoopalpally	6.8%
Mahbubnagar	6.0%
Nirmal	4.6%
Jagtial	3.9%
Total	100.0%

Insights: W Hyderabad has the highest numbers of domestic visitors(84 Millions) from 2016-2019 which covers overall 29.2% visitors in top 10 districts.

Hyderabad's rich history, economic growth, excellent infrastructure, and diverse offerings make it a popular destination for visitors from around the world.



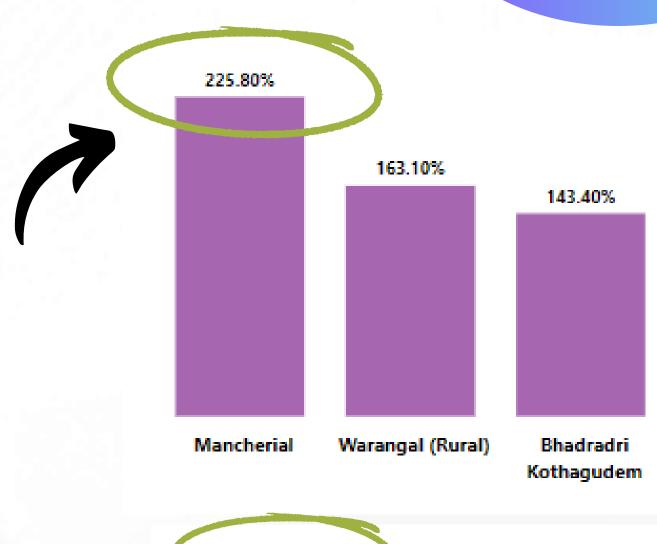
List down the top 3 districts based on compounded annual growth rate (CAGR) of visitors between (2016-2019).

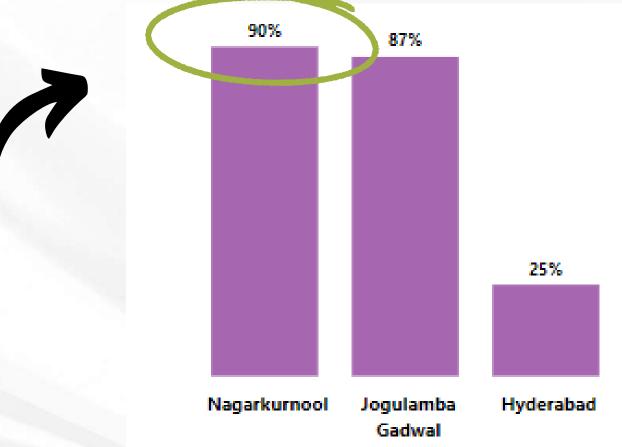
CAGR of Domestic Visitors

Districts	Visitors_2016	Visitors_2019	CAGR
Mancherial	7802	269810	225.80%
Warangal (Rural)	19400	353500	163.10%
Bhadradri Kothagudem	889030	12817737	143.40%

CAGR of Foreign Visitors

Districts	Visitors_2016	Visitors_2019	ÇAGR
Nagarkurnool	29	199	90%
Jogulamba Gadwal	45	295	87 %
Hyderabad	163631	319300	25%







Insights:

CAGR of Domestic Visitors



Mancherial with 225.80%, Warangle(Rural) with 163.10% and Bhadradri Kothagudem with 143.40% CAGR of domestic visitors are the top 3 districts.



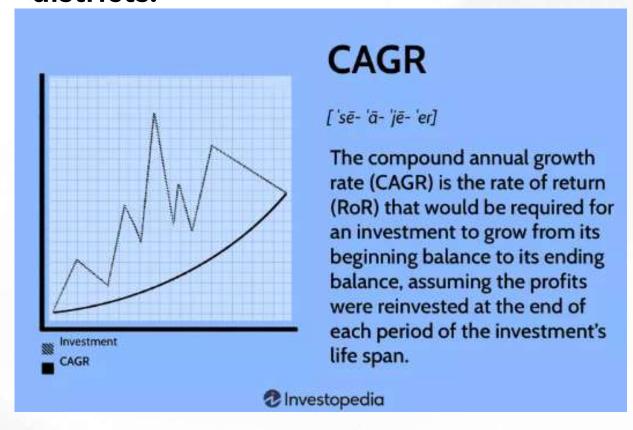
Mancherial has experienced a highest CAGR of 225.80% of visitors, which means that the number of visitors to the city has grown at an average annual rate of 225.80% over a certain period of time (2016-2019).

CAGR =Compounded annual growth rate (Ending value / Beginning Value) ^ (1/ No. of Period)-1

CAGR of Foreign Visitors



Nagarkurnool with 90%, Jogulamba Gadwal with 87% and Hyderabad with 25% CAGR of foreign visitors are top 3 districts.





An increasing CAGR of visitors is generally considered a positive sign for the local economy, as it leads to increased business opportunities, job creation, and overall economic growth.

It could be due to various reasons such as better infrastructure, increased marketing efforts, improved facilities, or new attractions.



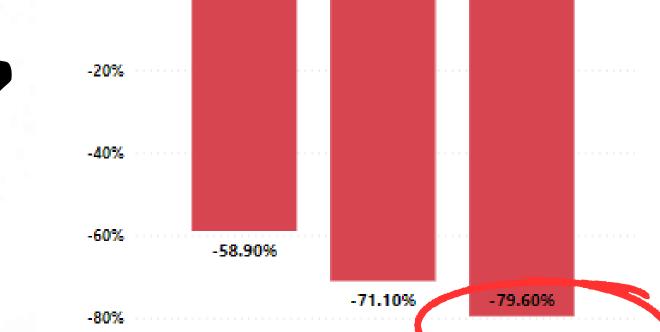
List down the bottom 3 districts based on compounded annual growth rate (CAGR) of visitors between (2016-2019).

CAGR of Domestic Visitors

Districts	Visitors_2016	Visitors_2019	ÇAGR
Warangal (Urban)	25788035	1795230	-58.90%
Nalgonda	5858461	140918	-71.10 %
Karimnagar	9167468	77491	-79.60%

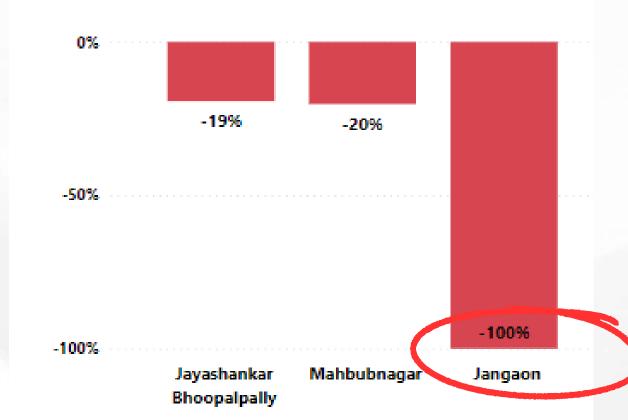


Districts	Visitors_2016	Visitors_2019	CAGR
Jayashankar Bhoopalpally	86	45	-19%
Mahbubnagar	868	440	-20%
Jangaon	2	0	-100%



Warangal

(Urban)



Nalgonda

Karimnagar

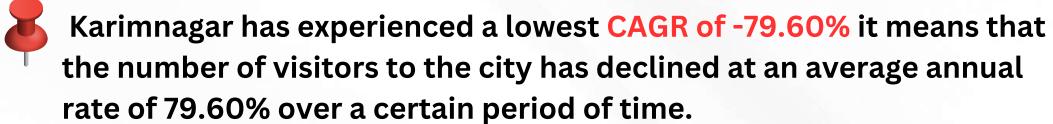




Insights:

CAGR of Domestic Visitors





CAGR of Foreign Visitors

Jayashankar Bhoopalpally with -19%, Mahbubnagar with -20% and Jangaon with -100% CAGR of foreign visitors are the bottom 3 districts.

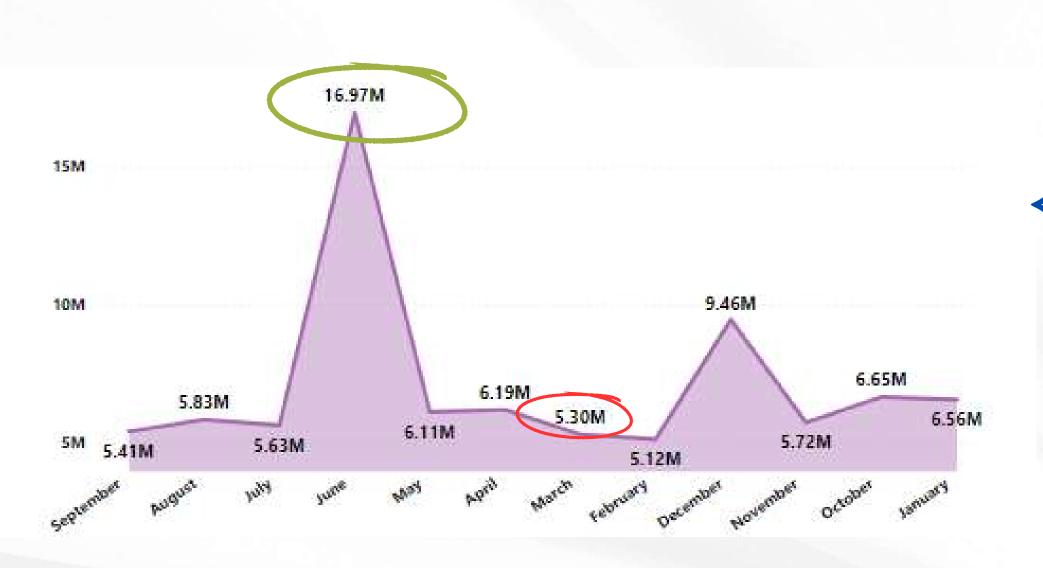
CAGR = Compounded annual rate (Ending value / Beginning Value) ^ (1/ No. of Period)-1



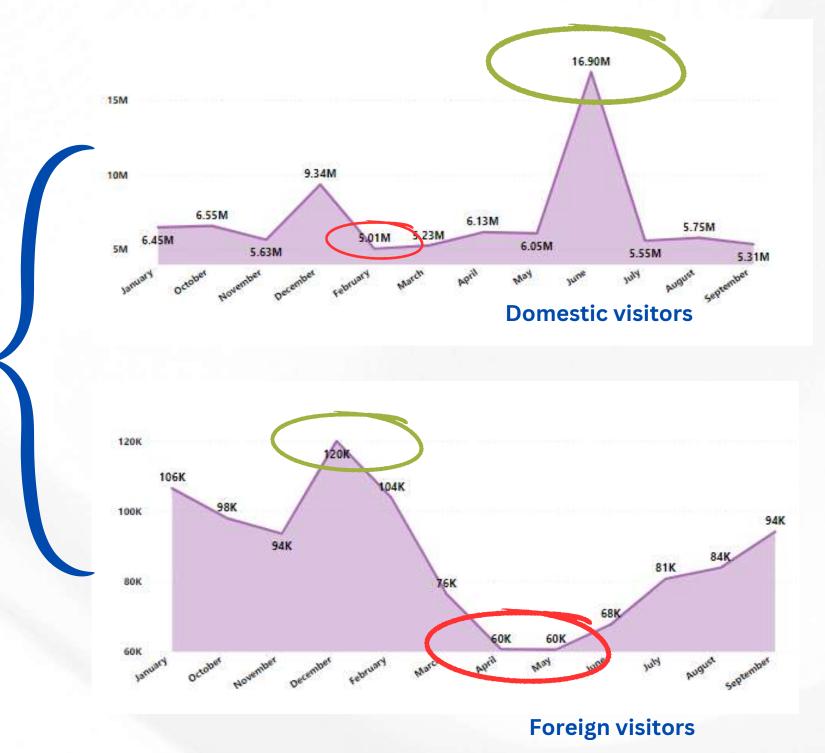
It is generally considered a negative sign for the local economy as it leads to decreased business opportunities, job losses, and overall economic stagnation.



What are the peak and low seasons months for Hyderabad based on the data from 2016-2019 for Hyderabad district?



Overall (2016-2019)





Insights:



From 2016-2019 June is the month which have highest number of visitors i.e, 16.97M in Hyderabad, but in foreign visitors case December is the month which have highest visitors.



Reason for highest visitors in June month in Telangana

Several festivals and events that take place in Hyderabad during this time. For example, Bonalu festival, which is a major cultural event celebrated in the city.



Reason for highest visitors in December month by foreign in Telangana

Christmas and New Year is main reason for increment in the number of foreign visitors in Telengana, because Christmas and New Year are celebrated with great enthusiasm in Hyderabad, particularly in the Christian-majority areas of the city. Many foreign visitors come to Hyderabad to witness the festive spirit and take part in the celebrations.



Government plan for the peak seasons and boost low seasons by introducing new events.

- Conduct cultural events, festivals, or sports tournaments in low seasons to attract tourist.
- Promote the events to potential tourists through various channels such as social media, advertising, and press releases.



Show the top and bottom 3 districts with high domestic to foreign tourist ratio.

Top 3 districts

Districts	Domestic_visitors(D)	Foreign_visitors(F)	D-F Ratio
Nirmal	13315796	2	6657898
Jangaon	826280	2	413140
Adilabad	7321575	32	228799

Bottom 3 districts

Districts	Domestic_visitors(D)	Foreign_visitors(F)	D-F Ratio
Hyderabad	83900960	1044898	80
Warangal (Rural)	819162	306	2677
Mulugu	1819800	575	3165

Insights:



Nirmal is the district which has highest Domestic to foreign tourist ratio i.e, 6657898

A high domestic to foreign tourist ratio means that the majority of the visitors to a destination are from same country, as compared to the number of visitors from other countries.



Hyderabad is the district which has lowest domestic to foreign tourist ratio i.e, 80.

A low domestic to foreign tourist ratio may indicate that the destination is more popular among international travelers and may be considered a positive thing for the local economy, as it can bring in foreign currency and boost international trade.



Government can learn from top districts and replicate the various corporate or cultural events to attract domestic as well as foreign visitors in the bottom districts.





Secondary Research Questions





List the top and bottom 5 districts based on 'population to tourist footfall ratio*' ratio in 2019.

Top 5 districts

District	Population	Total_visitors_2019	Population-footfall_ratio
Rajanna Sircilla	552037	16832897	30.49
Bhadradri Kothagudem	1069261	12817737	11.99
Narayanapet	41752	389250	9.32
Medak	767428	5452570	7.10
Mulugu	294671	1820375	6.18

Bottom 5 districts

District	Population	Total_visitors_2019	Population-footfall_ratio
Kamareddy	972625	534	0.00
Vikarabad	927140	0	0.00
Suryapet	1099560	0	0.00
Medchal	2440073	0	0.00
Ranga Reddy	2446265	0	0.00

Insights:

Plan to accommodate more tourists for districts which have lowest population to footfall ratio.



Develop a tourism development plan: This plan should be comprehensive and include recommendations for improving infrastructure, developing new tourist activities, and promoting the district to potential visitors.

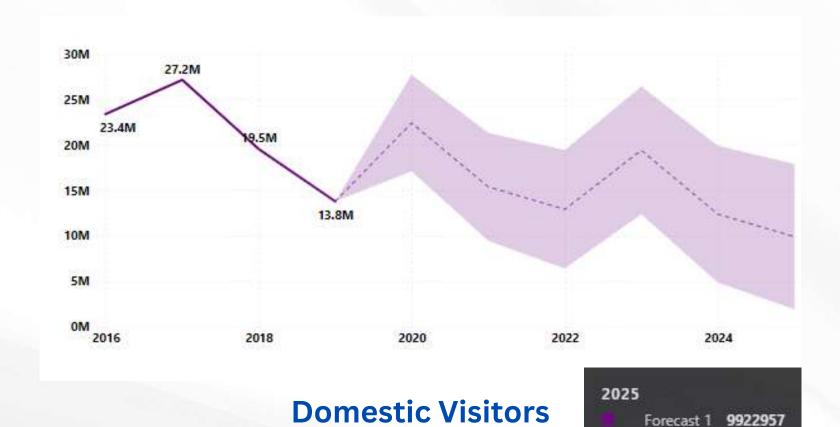


Identify funding sources: Implementing the tourism development plan will require funding. Identify potential sources of funding, such as government grants, private investment, and tourism taxes.

*Ratio: (Total visitors / Total residents population in the given year).



What will be the projected number of domestic and foreign tourists in Hyderabad in 2025 based on the growth rate from previous years?







- Estimating tourist in Hyderabad for 2025 based on the growth rate from previous year, the government can focus on developing and maintaining the infrastructure to further boost the tourism industry.
- This information can help the government to plan the budget and allocate resources to different sectors of the economy, including tourism.

Upper bound 17900446

Lower bound 1945468



Estimate the projected revenue for Hyderabad in 2025

2025

Forecast 1

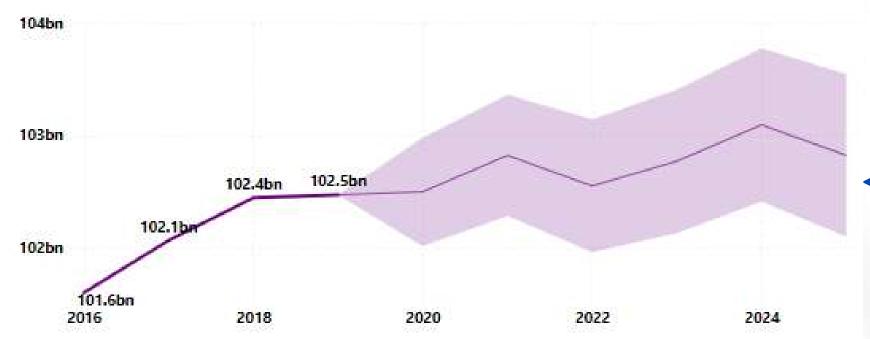
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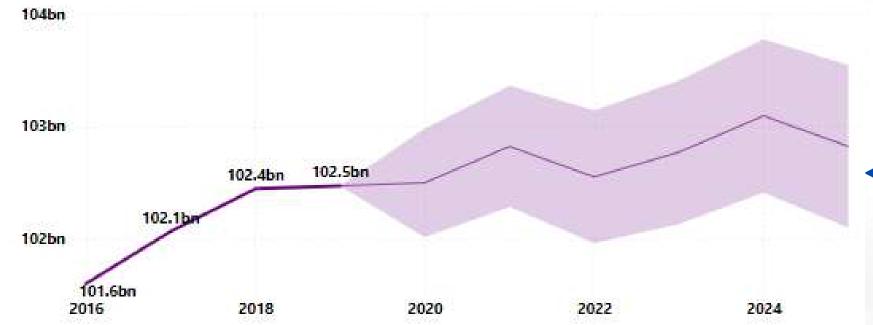
Upper bound 1,03,54,67,79,481.95

Lower bound 1,02,09,68,00,533.28

2025 Forecast 1 ₹11,90,75,48,408.92 Upper bound ₹21,48,05,35,749.13 Lower bound ₹2,33,45,61,068.71

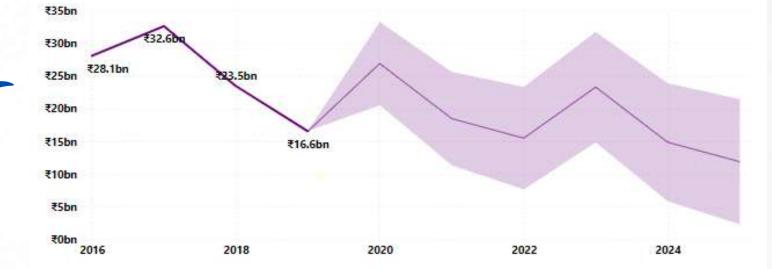
Overall Revenue





Insights:

- Estimating revenue for Hyderabad for 2025 can help the government to make informed decisions and develop policies that can drive economic growth and development in the city.
- This information can help the government to prioritize the allocation of resources and ensure that the sectors that are likely to generate the highest revenue receive adequate resources.



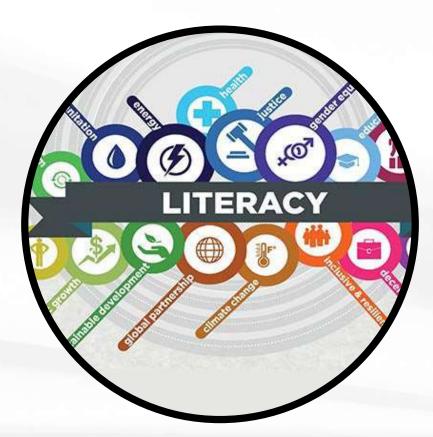
Revenue from Domestic Visitors



Revenue from Foreign Visitors

SUGGESTED AREAS FOR FURTHER SECONDARY RESEARCH TO GET MORE INSIGHTS









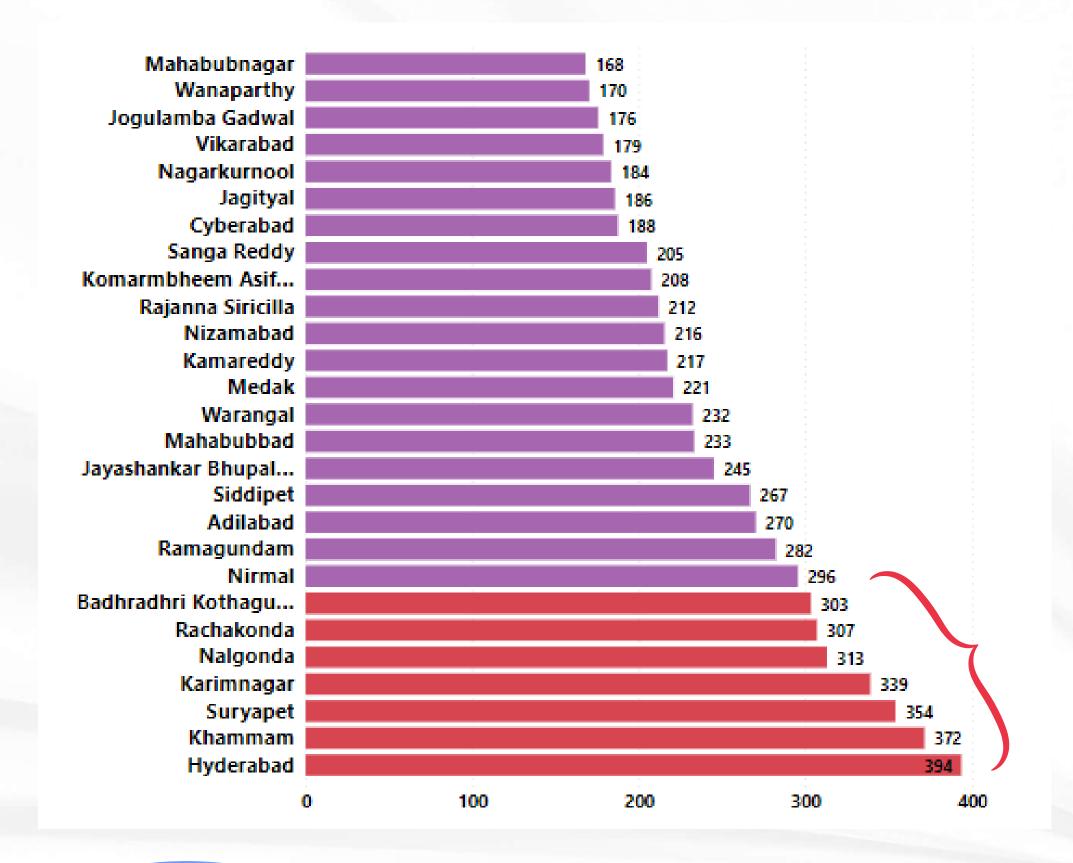


SOURCE: OPEN DATA TELANGANA





District-Wise Crime Rate in Telangana (2016) Crime rate (per 1 lakh population)



Insights:



One of the reasons behind highest crime in Hyderabad is increasing tourism.

Government Actions:

- Increase police presence and improve law enforcement.
- Increase surveillance technology.
- Implement community policing programs



District-Wise Literacy Rate in Telangana: (Census 2011)

Districts	Males literacy rate	Females literacy rate
ADILABAD	73.48	53.40
BHADRADRI	73.56	59.33
HYDERABAD	86.99	79.35
JAGTIAL	70.60	50.38
JANGAON	71.21	51.69
JAYASHANKAR	70.05	50.76
JOGULAMBA	60.05	39.48
KAMAREDDY	67.37	46.13
KARIMNAGAR	77.94	60.38
KHAMMAM	73.69	58.31
KOMARAM BHEEM	65.99	47.50
MAHABUBABAD	66.52	47.81
MAHABUBNAGAR	66.77	46.83
MANCHERIAL	72.96	55.59
MEDAK	67.51	45.15
MEDCHAL	87.44	77.34
NAGARKURNOOL	64.85	43.64
NALGONDA	73.90	53.46
NIRMAL	69.03	47.14
NIZAMABAD	74.08	54.95
PEDDAPALLI	73.68	57.36
RAJANNA	73.47	52.17
RANGAREDDY	78.94	64.63
SANGAREDDY	73.02	54.84
SIDDIPET	72.30	51.08
SURYAPET	73.39	54.85
VIKARABAD	67.58	48.32
WANAPARTHY	65.73	45.27
WARANGAL (R)	71.90	50.67
WARANGAL (U)	84.40	67.98
YADADRI	75.82	55.02

Districts	Females literacy r	ate	Districts	Females literacy rate
HYDERABAD	79	.35	JOGULAMBA	39.48
MEDCHAL	// 77	.34	NAGARKURNOOL	43.64
WARANGAL (U)	67	.98	MEDAK	45.15
RANGAREDDY	64	.63	WANAPARTHY	45.27
KARIMNAGAR	60	.38	KAMAREDDY	46.13
Top 5 female literacy	rate		Bottom 5 female lite	eracy rate





Jogulamba, Nagarkurnool, Medak, wanaparthy, Kamareddy are the Districts which have lowest female literacy rate which is point of concern.

Government Actions-

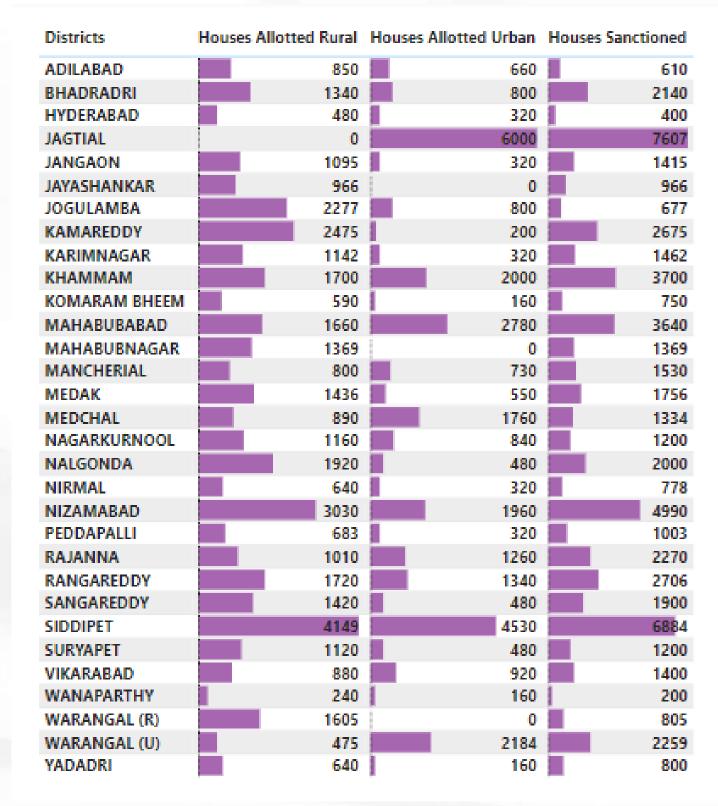


- Providing support for girls' education beyond the classroom. eg: After-school programs and vocational training.
- Addressing social and cultural barriers. eg:Early marriage, poverty, and gender discrimination.
- Promoting gender equality.eg: Advocating for girls' rights to education.
- Providing financial support. eg: Scholarships and fee waivers.



District-Wise Housing in Telangana (2015-2016)

Top 10
Houses Sanctioned









Jagtial, Siddipet are the top most districts in which highest number of Sanctioned Houses.



Wanaparthy with only 200 sanctioned houses is the lowest one.



District-Wise Demographics in Telangana (Census 2011)

Top 5 sex ratio

Districts	Females	Males	Sex Ratio (Females per 1000 Males)
ADILABAD	353K	356K	989
BHADRADRI	537K	532K	1008
HYDERABAD	1925K	2019K	954
JAGTIAL	501K	484K	1036
JANGAON	283K	284K	997
JAYASHANKAR	357K	354K	1009
JOGULAMBA	301K	309K	972
KAMAREDDY	494K	478K	1033
KARIMNAGAR	501K	505K	993
KHAMMAM	703K	699K	1005
KOMARAM BHEEM	258K	258K	998
MAHABUBABAD	386K	388K	996
MAHABUBNAGAR	742K	745K	995
MANCHERIAL	399K	408K	977
MEDAK	389K	379K	1027
MEDCHAL	1193K	1247K	957
NAGARKURNOOL	424K	438K	968
NALGONDA	800K	818K	978
NIRMAL	363K	347K	1046
NIZAMABAD	803K	768K	1044
PEDDAPALLI	396K	399K	992
RAJANNA	278K	274K	1014
RANGAREDDY	1192K	1254K	950
SANGAREDDY	750K	777K	965
SIDDIPET	508K	504K	1008
SURYAPET	549K	551K	996
VIKARABAD	464K	463K	1001
WANAPARTHY	283K	295K	960
WARANGAL (R)	358K	360K	994
WARANGAL (U)	540K	541K	997
YADADRI	365K	375K	973

Districts	Sex Ratio (Females per 1000 Males)			Districts	Sex Ratio (Females per 1000 Males)		
NIRMAL		1046		RANGAREDDY			950
NIZAMABAD		1044		HYDERABAD	/		954
JAGTIAL		1036		MEDCHAL			957
KAMAREDDY		1033		WANAPARTHY			960
MEDAK		1027		SANGAREDDY			965

Bottom 5 sex ratio



Nirmal, Nizamabad Jagtial, Kamareddy, Medak are the top 5 districts with highest Sex ratio in Telangana.



- One factor contributing to the higher sex ratio in Telangana could be the state's efforts to improve access to education and healthcare for girls and women.
- This has helped to reduce gender-based discrimination and promote gender equity in the state.

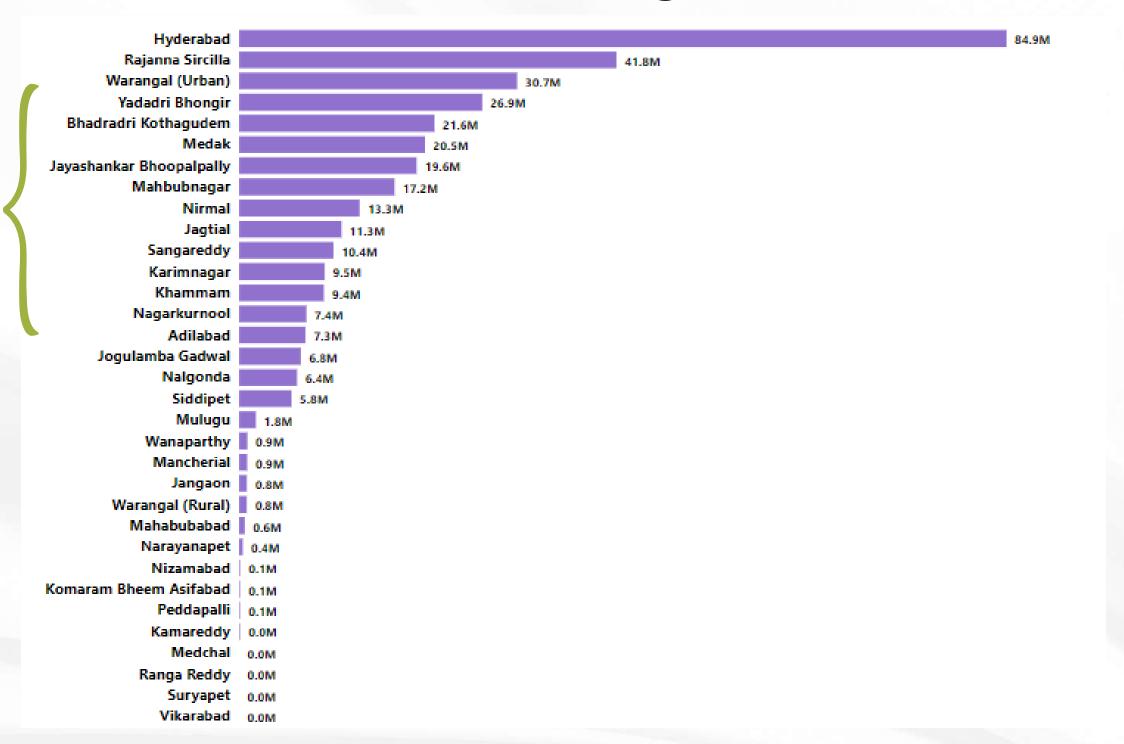




Recommendations to Government



Which districts has the highest potential for tourism growth and what actions government can take?



Actions Government can take:

- **E** Focus on niche tourism
- **Encourage private** investment in tourism
- Promote food and culinary tourism
- Develop tourism infrastructure
- Develop and promote sustainable tourism



Cultural/ Corporate events to boost tourism:

- (a) What kinds of events the government can conduct?
- (b) Which month(s)?
- (c) Which districts?

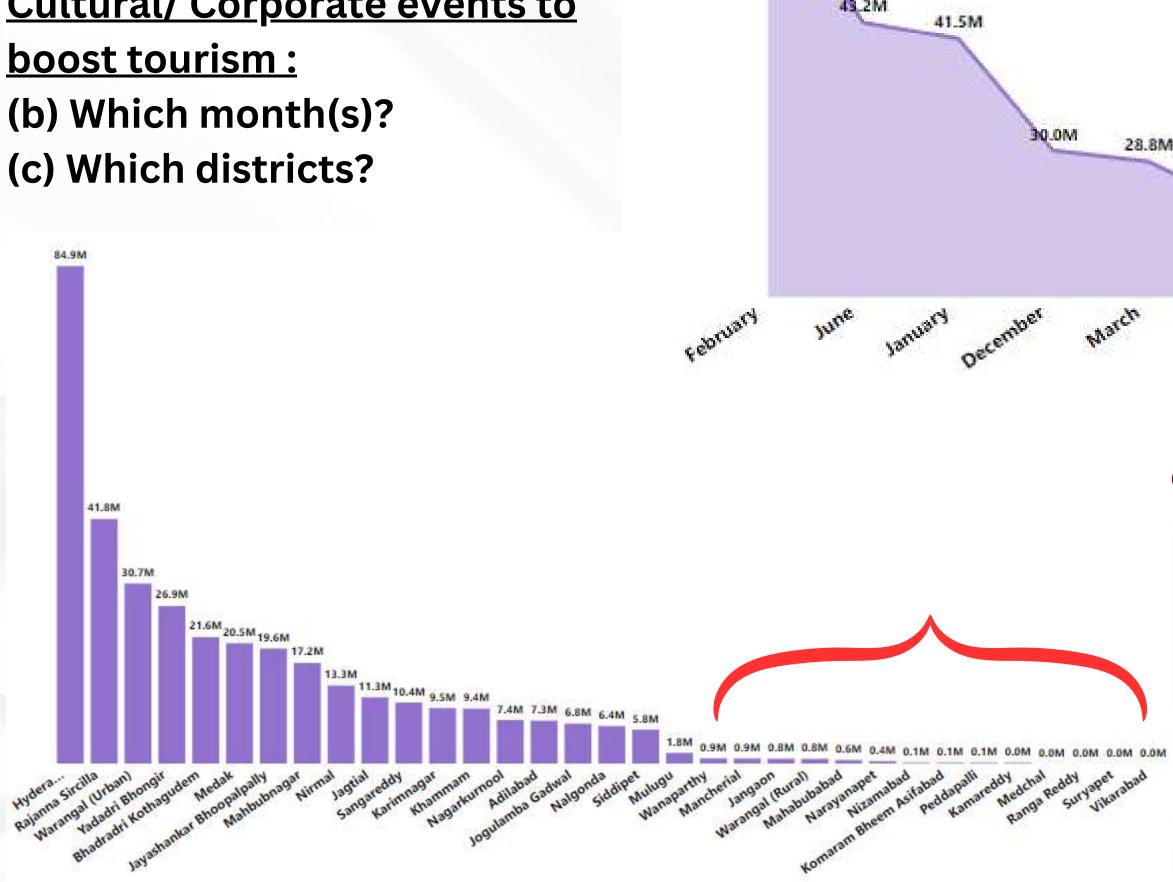


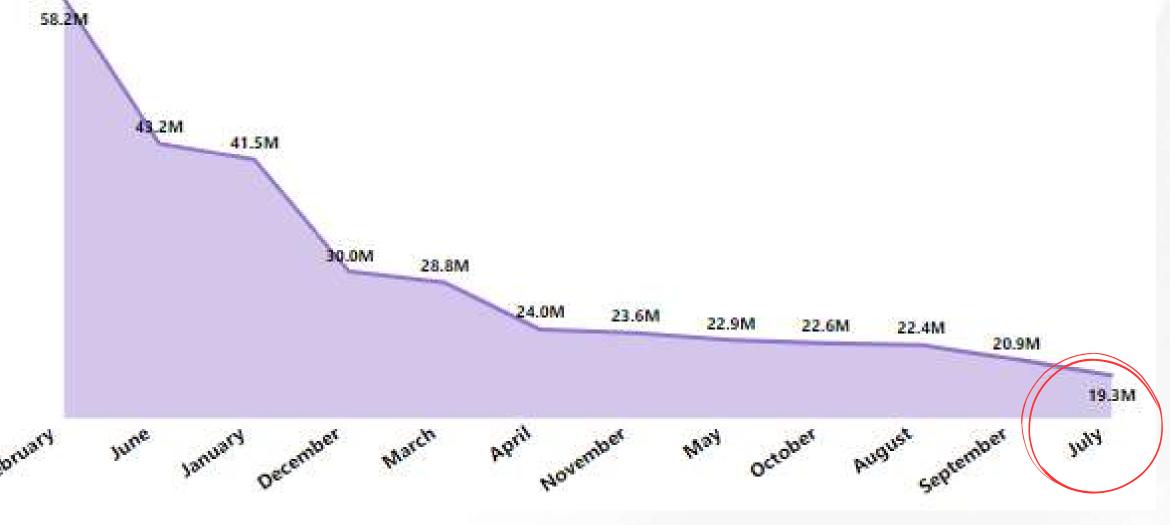
- a) What kinds of events the government can conduct?
- Art and craft exhibitions: Showcasing the local art and craft traditions of Telangana through exhibitions and fairs can attract tourists who are interested in traditional arts and crafts. This could include exhibitions of local handicrafts, textiles, paintings, and sculptures.
- Religious and spiritual events: Telangana has various religious and spiritual sites, and organizing events such as pilgrimages, spiritual retreats, and religious festivals can attract tourists who are interested in exploring the religious and spiritual aspects of the state.
- Adventure sports events: Telangana has several adventure sports opportunities such as rock climbing, trekking, and water sports. Organizing adventure sports events and competitions can attract adventure enthusiasts and thrill-seekers to the state.
- Specialized workshops and seminars: Organizing workshops, seminars, and conferences on topics such as art, culture, history, heritage conservation, and sustainable tourism can attract scholars, researchers, and professionals to the state.



Cultural/ Corporate events to

- (b) Which month(s)?
- (c) Which districts?







(b) July is the month which has lowest number of visitors and requires more cultural and corporate events to boost tourism.



(c) Districts which have less than 1 M visitors requires to learn from other district with highest visitors and conduct various culural event to attract more visitors.



Dubai has made itself a business hub and enjoys massive business tourism. Can Hyderabad emulate the Dubai model? Provide insights based on your research.



Dubai has really established itself as a major business hub, attracting millions of tourists every year. Hyderabad, on the other hand, is a rapidly growing city in India in terms of infrastructure and economic development.



While Hyderabad may not be able to completely emulate the Dubai model, there are certainly some insights that can be drawn from Dubai's experience to help Hyderabad develop as a business hub and tourist destination.

Some key factors that have contributed to Dubai's success as a business hub, that Hyderabad should learn from . Key factors are:

- *Importance of investing in infrastructure
- *A favorable business environment
- *Promotion and marketing
- *Innovation and technology
- *Education and talent development

In summary, while it may not be possible for Hyderabad to replicate the Dubai model entirely, there are certainly lessons that can be drawn from Dubai's success.



Provide all other recommendations that can boost the telangana tourism, particularly Hyderabad.



Recommendations

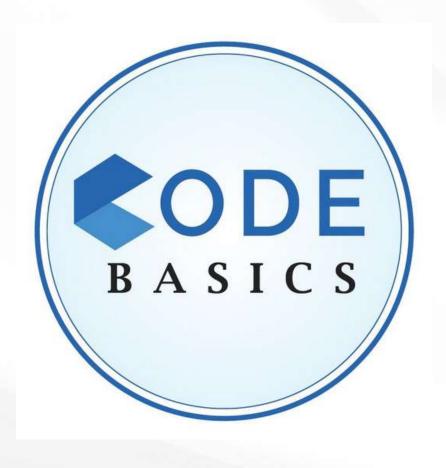
Promote Hyderabad's unique cuisine

Enhance the city's infrastructure

Highlight historical and cultural sites

Develop tourist-friendly policies

Develop eco-tourism



THANK YOU!



