



INSIGHTS FOR TELANGANA GOVT TOURISM DEPARTMENT


1



Created by
Jyoti Chandola

OBJECTIVE

Telangana is one of India's leading states and has published its tourism data under its open data policy.



Telangana Government wants to increase their revenue by improving administrative operations.



The idea is to find the patterns in the given data, do additional research, and give data-informed recommendations to the Telangana government.



Telangana Government needs insight on their 12 research questions.

TELANGANA DISTRICTS



There are 33 districts in Telangana which is a good number in respect of tourism.



Some of the districts are famous for their ancient monuments, forts, cultural heritage.



Natural beauty like waterfalls and wildlife plays a major part of attraction.

1. जोगलाम्बा गदवाल
(JOGULAMBA GADWAL)

2. वानपर्ति (WANAPARTHY)

3. नारायणपेट (NARAYANPET)

4. महबूबनगर (MAHABUBNAGAR)

5. नागरकर्नूल (NAGARKURNOOL)

6. नलगोंडा (NALGONDA)

7. सूर्यपेट (SURYAPET)

8. खम्मम (KHAMMAM)

9. महाबूबाबाद (MAHABUBABAD)

10. भद्राद्री कोठागुडम
(BHADRADRI KOTHAGUDEM)

11. मुलुगु (MULUGU)

12. वरंगल ग्रामीण
(WARANGAL RURAL)

13. वरंगल शहर
(WARANGAL URBAN)

14. जनगाँव (JANGAON)

15. यादाद्री भुवनगिरी
(YADADRI BHUVANAGIRI)

16. मेड्चल मल्काजगिरी
(MEDCHAL-MALKAJGIRI)

17. रंगारेड्डी (RANGA REDDY)

18. विकाराबाद (VIKARABAD)

19. संगारेड्डी (SANGAREDDY)

20. मेदक (MEDAK)

21. सिद्धिपेट (SIDDIPET)

22. करीमनगर (KARIMNAGAR)

23. जयशंकर भूपलपल्ली
(JAYASHANKAR BHUPALAPALLY)

24. पेद्दपल्ले (PEDDAPALLI)

25. राजन्ना सिरसिल्ला
(RAJANNA SIRICILLA)

26. कामारेड्डी (KAMAREDDY)

27. निज़ामाबाद (NIZAMABAD)

28. जगित्याल (JAGITIAL)

29. मंचेरियल (MANCHERIAL)

30. कोमरम भीम
(KOMARAM BHEEM)

31. निर्मल (NIRMAL)

32. आदिलाबाद (ADILABAD)

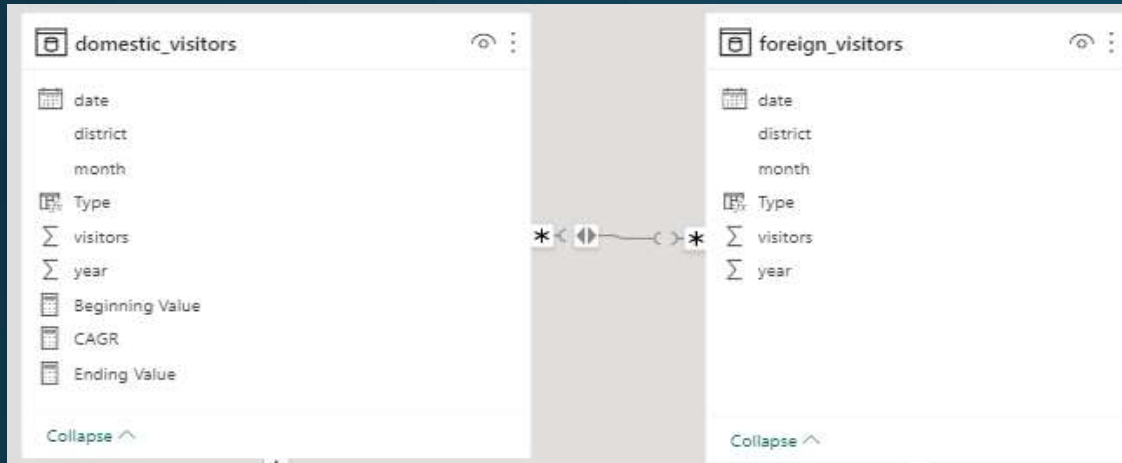
33. हैदराबाद (HYDERABAD)



INPUT DATA AND TOOLS USED



Main Table After Merging



- We are provided with separate Domestic visitors and Foreign visitors data each for 2016 to 2019 year.
- To make data easy for analysis we have merged domestic and foreign visitor table into one table each containing all year data i.e. 2016 to 2019.
- Tools used MySQL for data analysis and Power Bi for Visualization.



Output

Question:-

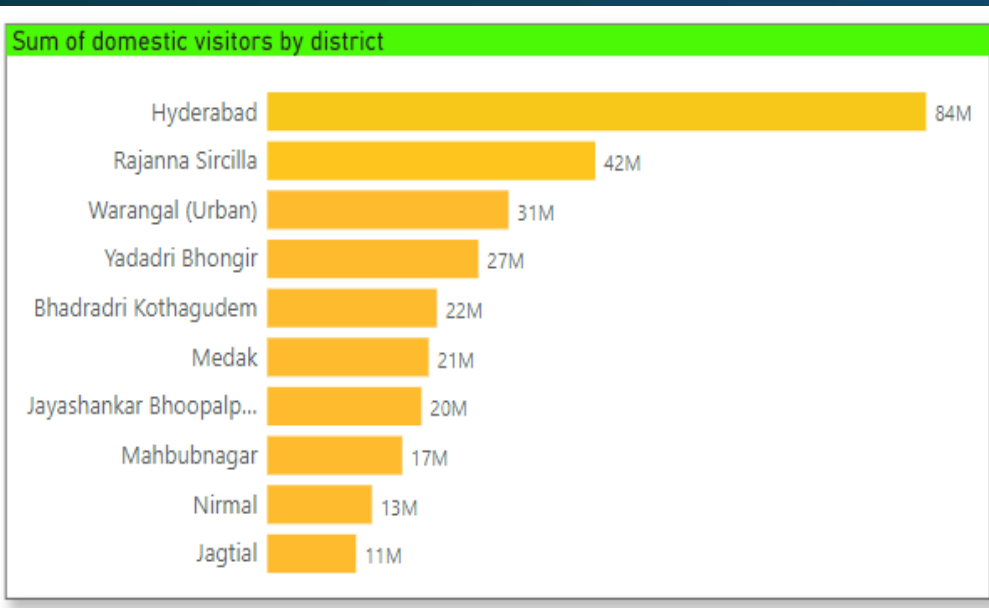
district	total_visitors
Hyderabad	83900960
Rajanna Sircilla	41763276
Warangal (Urban)	30726603
Yadadri Bhongir	26893080
Bhadradi Kothagudem	21600962
Medak	20542639
Jayashankar Bhoopalpally	19632865
Mahbubnagar	17180118
Nirmal	13315796
Jagtial	11303514

Table Form

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

➤ Insight

- Hyderabad has the highest no. of Domestic Visitors of 84 Millions followed by Rajanna Sircilla with 42M of visitors.



Visual Form

Output

Question:-

Domestic Visitors

district	Visitors_in_2016	Visitors_in_2019	CAGR
Mancherial	7802	269810	225.8
Warangal (Rural)	19400	353500	163.15
Bhadradi Kothagudem	889030	12817737	143.39

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

➤ Insight

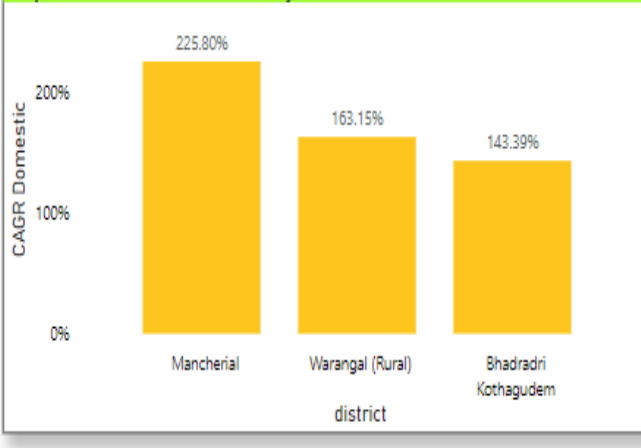
- The compounded annual growth rate (CAGR) is one of the most accurate ways to calculate and determine returns for anything that can rise or fall in value over time.
- Like, here we can see that the CAGR of Mancherial district is Highest of 225.80% in Domestic visitors followed by Warangal(Rural) and Bhadradi Kothagudem.

Likewise, for foreign visitors Nagarkurnool has the highest CAGR of 90.03% followed by Jogulamba gadwal and Hyderabad.

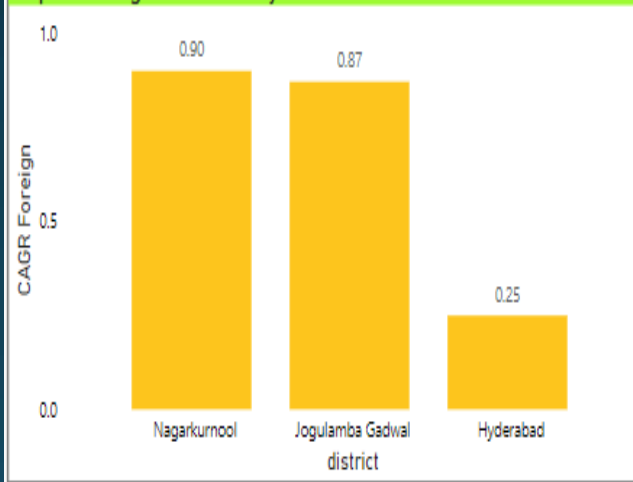
Foreign Visitors

district	Visitors_in_2016	Visitors_in_2019	CAGR
Nagarkurnool	29	199	90.03
Jogulamba Gadwal	45	295	87.16
Hyderabad	163631	319300	24.96

Top 3 Domestic Districts by CAGR

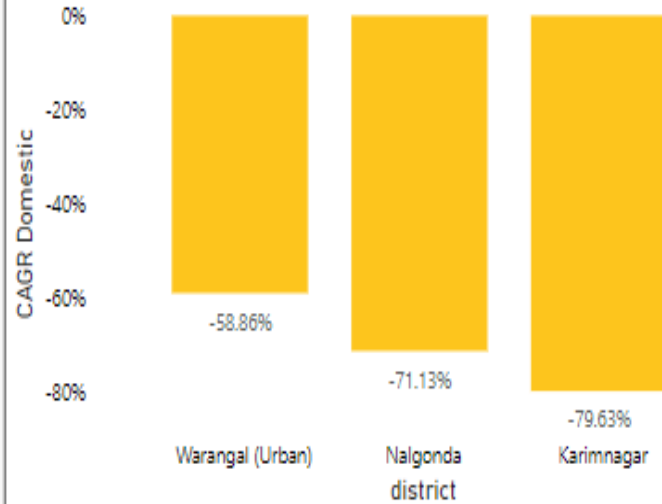


Top 3 Foreign Districts by CAGR

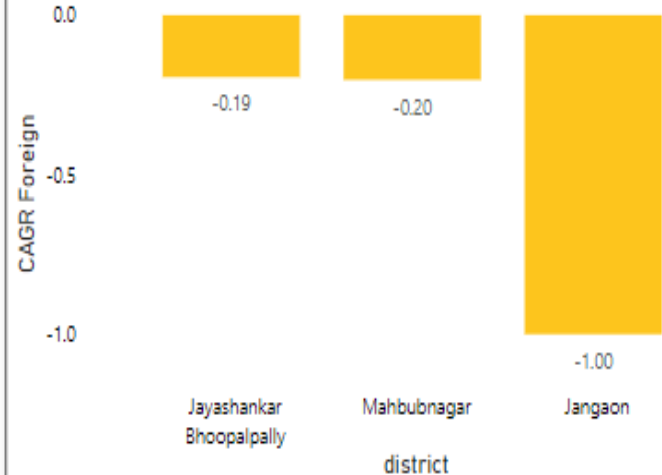


Output

Bottom 3 Domestic Districts by CAGR



Bottom 3 Foreign Districts by CAGR



Domestic Visitors

district	visitors_in_2016	visitors_in_2019	CAGR
Karimnagar	9167468	77491	-79.63
Nalgonda	5858461	140918	-71.13
Warangal (Urban)	25788035	1795230	-58.86

Foreign Visitors

district	Visitors_in_2016	Visitors_in_2019	CAGR
Jangaon	2	0	-100
Mahbubnagar	868	440	-20.27
Jayashankar Bhoopalpally	86	45	-19.42

Question:-

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

➤ Insight

- Karimnagar has the least growth with -79.63% CAGR followed by Nalgonda and Warangal(Urban) with -71.13% and -58.86% CAGR respectively in Domestic Visitors.
- Similarly for Foreign Visitors Jangaon has the least CAGR -100% followed by Mahbubnagar and Jayashankar Bhoopalpally.
- Telangana Govt. can look into **some factors like proper transportation, Lodging facilities, and basic attractions like Malls ,Restaurants, Markets** should be there with a variety of options.

Output

Question:-

4. What are the peak and low season months for Hyderabad based on the data from 2016 to 2019?

➤ Insight

Domestic Visitors

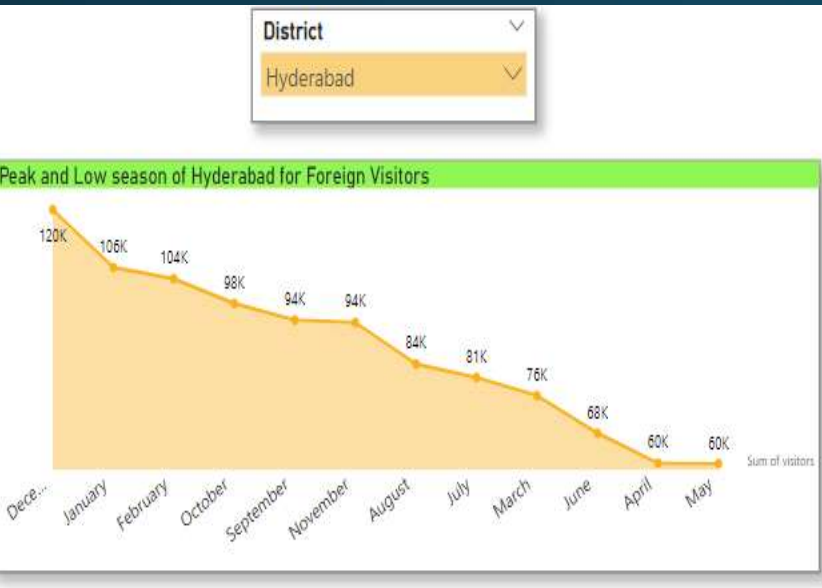
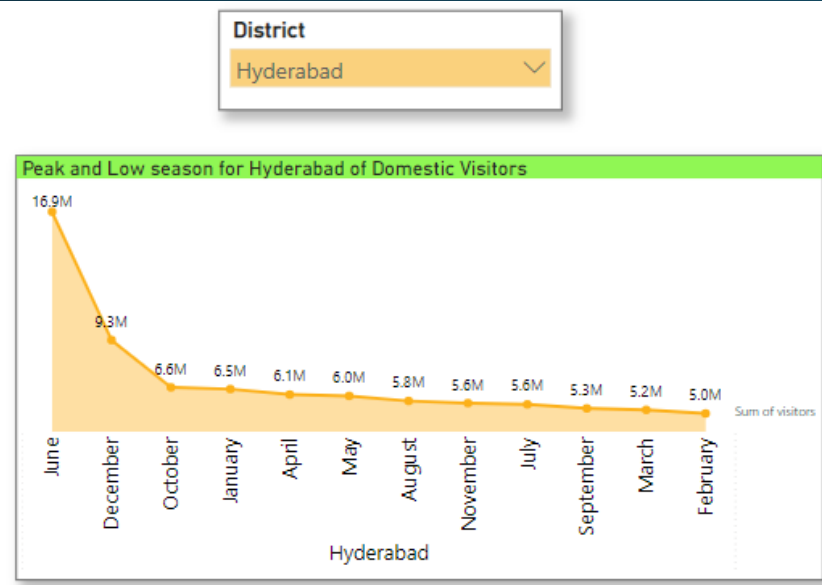
❖ June is the Peak season of Hyderabad for Domestic Visitors 16.90M followed by December which has 9.34M as in India it is the vacation time so most of the families plan tour in these months.

Foreign Visitors

❖ December is the peak month for Foreign Visitors with 120K visitors followed by January and February with 106.45K and 103.78K visitors respectively.

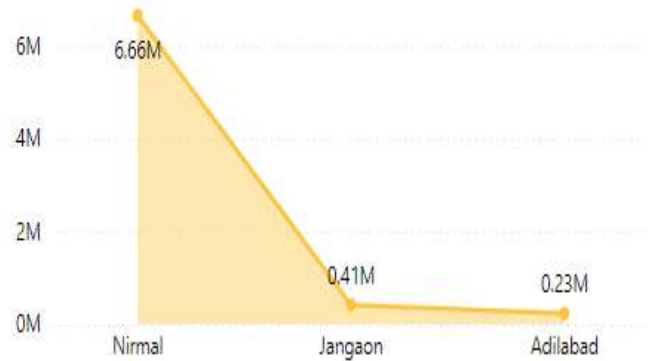
month	2016	2017	2018	2019	Total
June	12.03M	2.01M	1.60M	1.26M	16.90M
December	1.23M	4.87M	1.96M	1.28M	9.34M
October	0.90M	2.20M	2.21M	1.24M	6.55M
January	1.12M	1.92M	1.98M	1.43M	6.45M
April	1.13M	2.37M	1.59M	1.05M	6.13M
May	1.29M	2.27M	1.19M	1.31M	6.05M
August	1.06M	1.98M	1.59M	1.12M	5.75M
November	0.91M	1.97M	1.67M	1.07M	5.63M
July	1.10M	1.89M	1.47M	1.09M	5.55M
September	0.83M	2.01M	1.51M	0.96M	5.31M
March	1.02M	1.78M	1.42M	1.01M	5.23M
February	0.78M	1.89M	1.37M	0.98M	5.01M
Total	23.39M	27.16M	19.54M	13.80M	83.90M

month	2016	2017	2018	2019	Total
December	17.62K	38.93K	29.36K	34.08K	120.00K
January	15.87K	19.29K	35.38K	35.92K	106.45K
February	29.65K	18.10K	30.41K	25.62K	103.78K
October	12.81K	26.37K	30.07K	28.71K	97.95K
September	9.40K	27.86K	22.81K	34.02K	94.08K
November	8.08K	29.17K	23.49K	32.76K	93.50K
August	12.84K	16.99K	31.22K	22.73K	83.77K
July	17.14K	18.14K	17.46K	27.87K	80.62K
March	13.02K	13.88K	27.54K	21.93K	76.36K
June	10.28K	12.49K	24.68K	20.08K	67.52K
April	8.40K	13.00K	20.83K	18.27K	60.50K
May	8.52K	12.98K	21.55K	17.32K	60.38K
Total	163.63K	247.18K	314.79K	319.30K	1,044.90K



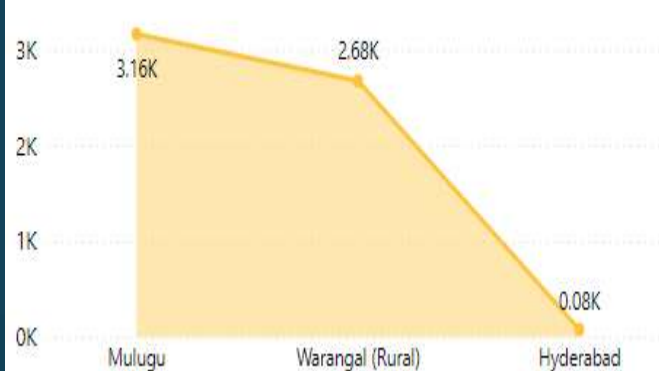
Output

Top 3 Districts with High Domestic to Foreign Ratio



district	Domestic_visitor	Foreign_visitor	DtoF_ratio
Nirmal	12975437	2	6487719
Jangaon	826280	2	413140
Adilabad	7321575	32	228799

Bottom 3 Districts with High Domestic to Foreign Ratio



district	Domestic_visitor	Foreign_visitor	DtoF_ratio
Hyderabad	83900960	1044898	80
Warangal (Rural)	819162	306	2677
Mulugu	1819800	575	3165

Question:-

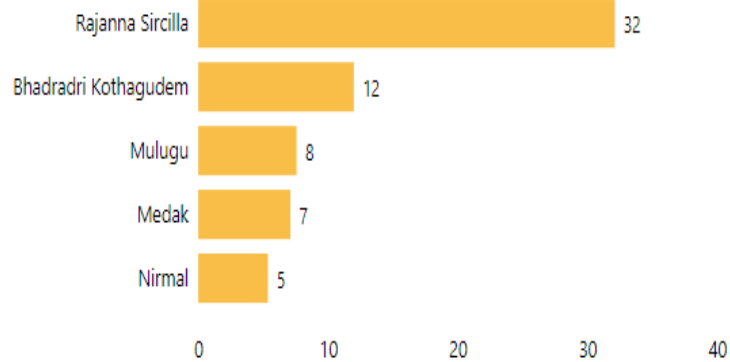
5. Show the top & bottom 3 districts with high domestic to foreign tourist ratio?

➤ Insight

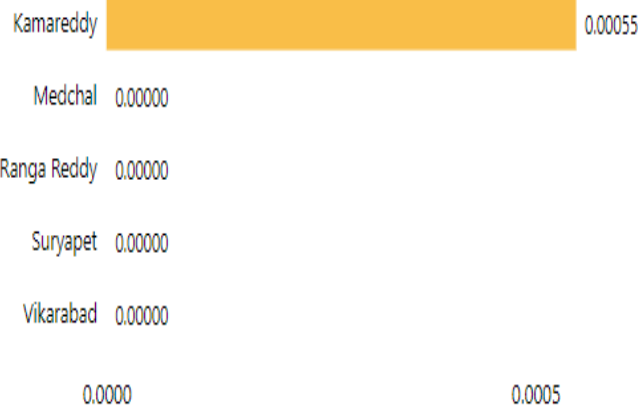
- ❖ **Nirmal has the highest Domestic to Foreign Ratio i.e. 6.66M** which means that less Foreign tourist visits in these district followed by Jangaon and Adilabad with 0.41M and 0.23M respectively.
- ❖ **Hyderabad has least Ratio of 0.08K** which means in this district the foreign tourist visits more followed by Warangal(Rural) and Mulugu with 2.68K and 3.16K respectively.
- ❖ Government may focus in districts with high ratio with some events, can open wildlife if possible, include cultural programme which attracts the foreign tourist and which results in a good revenue generation.

Output

Top 5 District by PopulationToTouristFootfall



Bottom 5 District by PopulationToTouristFootfall



year	District	Population	visitors	footfall_ratio
2019	Rajanna Sircilla	524073	16832897	32.1194
2019	Bhadradi Kothagudem	1068469	12817737	11.9964
2019	Mulugu	240200	1819800	7.5762
2019	Medak	767428	5452570	7.1050
2019	Nirmal	711406	3816778	5.3651

year	District	Population	visitors	footfall_ratio
2019	Medchal	2485110	0	0.0000
2019	Ranga Reddy	3529672	0	0.0000
2019	Suryapet	1176538	0	0.0000
2019	Vikarabad	1265670	0	0.0000
2019	Kamareddy	975425	534	0.0005

Question:-

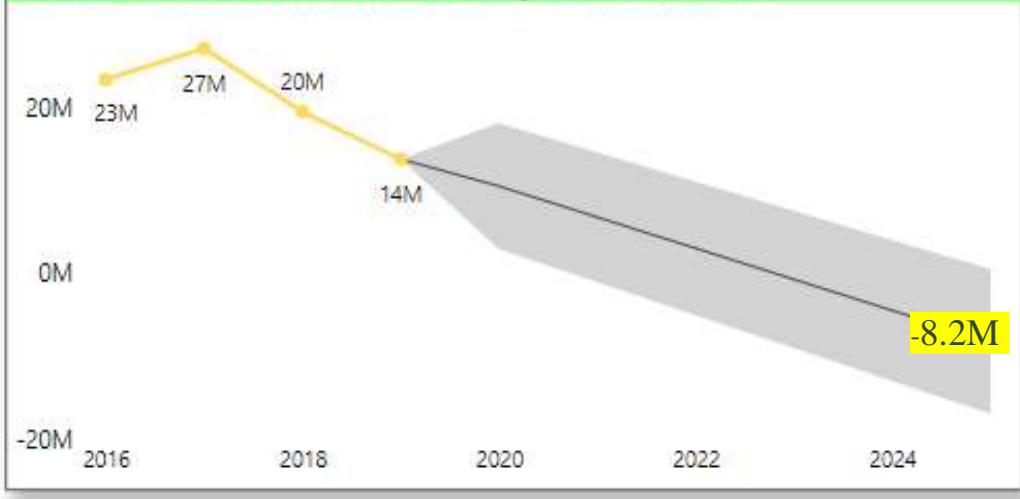
6. List the top & bottom 5 districts based on 'population to tourist footfall ratio' ratio in 2019?

➤ Insight

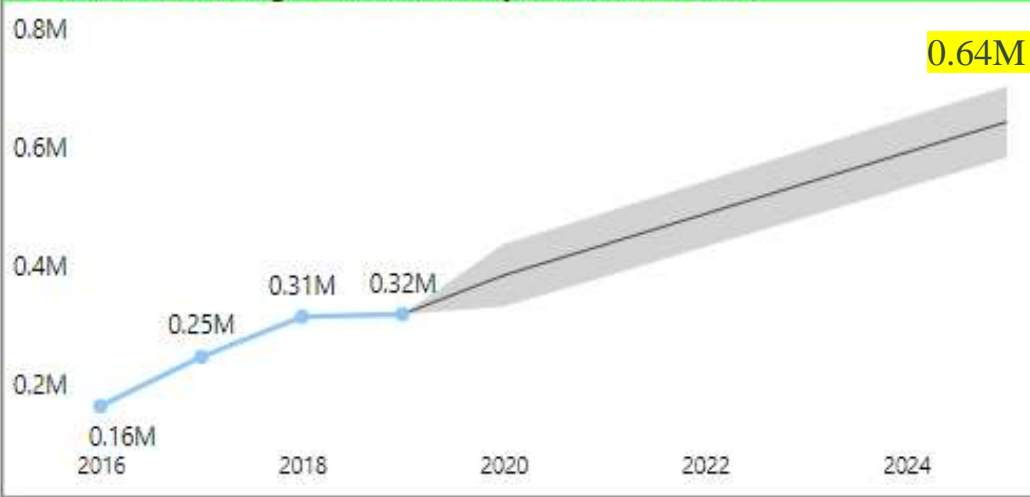
❖ Rajanna Sircilla has the highest ratio of 32% followed by Bhadradi Kothagudem and Mulugu with 12% and 8% respectively means in these district visitors came more than the population.

❖ Kamareddy has the lowest ratio and Medchal, Ranga Reddy, Suryapet, Vikarabad has 0 visitors, Govt should introduce temples, malls, Restaurants, amusement parks to attract tourist to these places as well.

Forecast of Domestic visitors of Hyderabad in 2025



Forecast of Foreign Visitors of Hyderabad in 2025

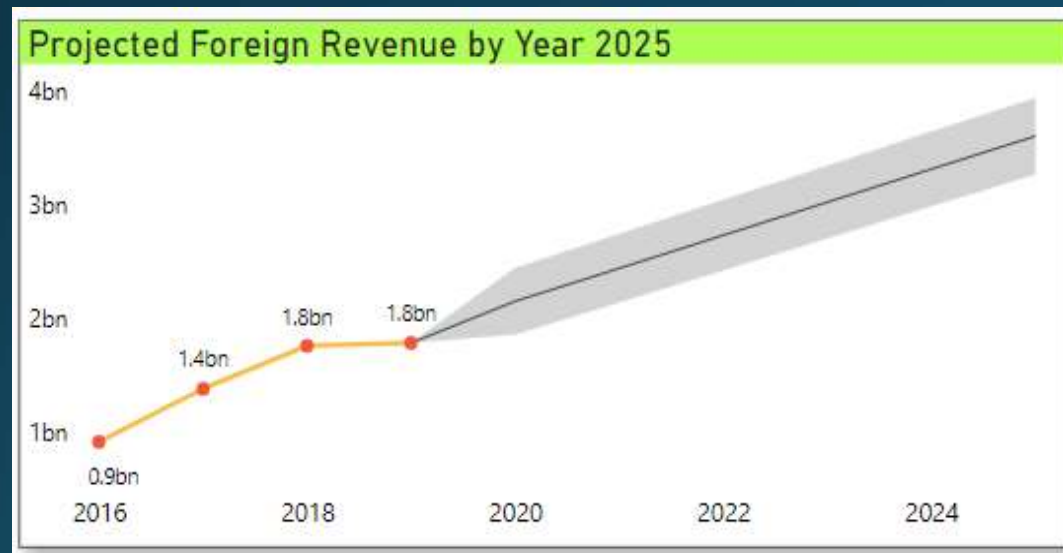
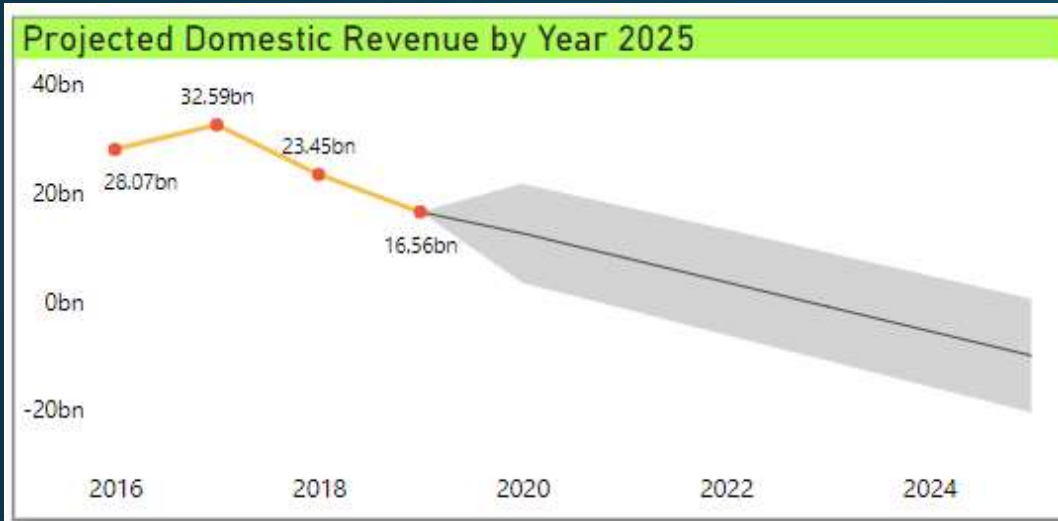


7. What will be the projected number of domestic and foreign tourists in Hyderabad in 2025 based on the growth rate from previous years?

➤ **Insight**

- ❖ Based on the data 2016-2019 Domestic Visitors are continuously decreasing by 2025.
- ❖ Whereas the Foreign visitors are continuously increasing by 2025.

Output



Question:-

8. Estimate the projected revenue for Hyderabad in 2025 based on average spend per tourist (approximate data)

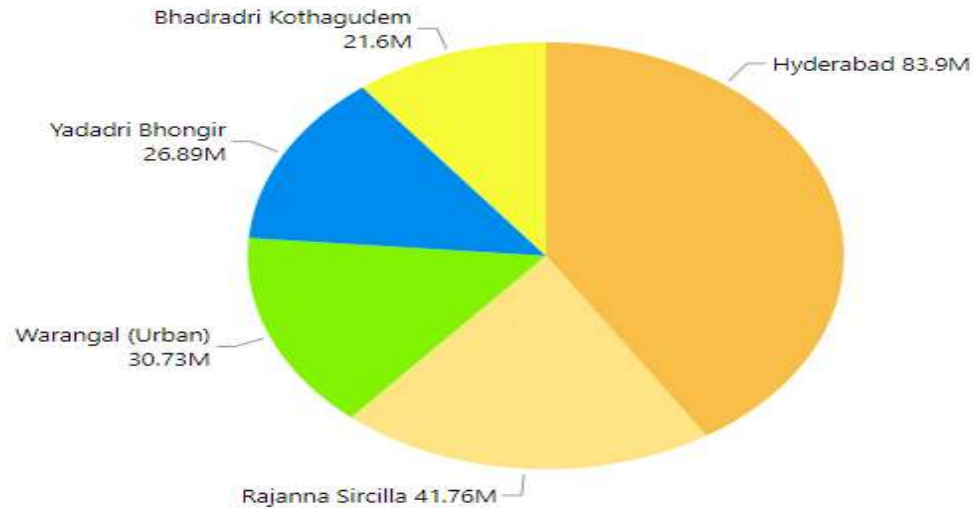
Tourist	Average Revenue	
Foreign Tourist	₹	5,600.00
Domestic Tourist	₹	1,200.00

➤ Insight

- ❖ As per the previous slide the domestic visitors of Hyderabad are decreasing therefore the revenue will also decrease by 2025 as per the data given.
- ❖ As per the projection there will be an increase in Foreign revenue by 2025.
- ❖ Therefore, based on this data Telangana Government can make strategies accordingly by organizing more events based on sports, culture etc. so that more domestic visitors will visit and generate more revenue and also make arrangements to meet the requirements of Foreign Visitors as their number will increase.

Output

Question:-

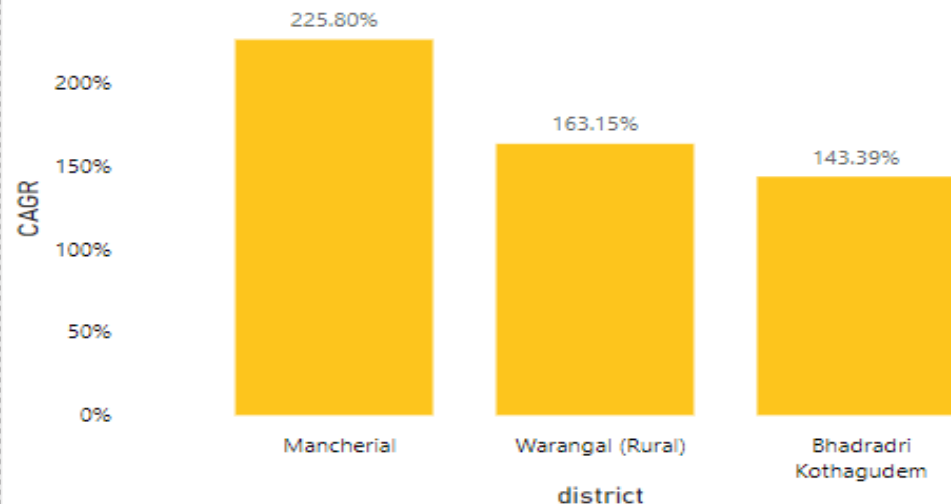


9. Districts with highest potential . Which districts has the highest potential for tourism growth and what actions government can take?

➤ Insight

- ❖ Hyderabad has the highest potential for both domestic and Foreign Tourism.
- ❖ Rajanna Sircilla, Warangal(Urban), Yadadri Bhongir and Bhadradi Kothagudem are also having high potential for tourism growth.
- ❖ Also the districts with High CAGR i.e. Mancherial, Warangal(Rural and Bhadradi Kothagudem has the high potential of Tourism growth. In these district Government can improve the infrastructure, market availability, Organizing attractive events, Connectivity.

Top 3 Districts by CAGR



10. Cultural/Corporate Events to boost Tourism

1

What Kind of Events the Government can conduct?

- ❖ Sports Events
- ❖ Food Festivals
- ❖ Cultural Festivals
- ❖ Exhibitions on Technologies

2

Which Month?

June, October, December, January will be the best month for attracting more visitors and generating high revenue.

3

Which District?

Hyderabad, Rajanna Sircilia, also district with Highest CAGR that is Mancherial, Warangal(Rural), Bhadadri Kothagudem

11. Dubai has made itself a business hub and enjoys massive business tourism. Can Hyderabad emulate the Dubai model?

- Today Dubai has become a Business Hub but the factors on which Dubai has focused are :
 - luxury tourism
 - World class Infrastructure
 - real estate
 - financial sectors.
- Dubai organizes Art fair showcasing contemporary art and the Dubai International Film Festival , International sporting events have greatly boosted its status as a tourist destination.



11. Dubai has made itself a business hub and enjoys massive business tourism. Can Hyderabad emulate the Dubai model?

International Tourists in Dubai



India is one of the top sources of visitors to Dubai, with 1,842,000 Indians touring the region in 2022. Oman is in the second position with 1,311,000 visitors, and Saudi Arabia occupies the third position with 1,216,000.

Country	Number of Tourists
India	1842000
Oman	1311000
Saudi Arabia	1216000
United Kingdom	1043000
Russia	758000
USA	590000
Germany	422000
France	364000
Pakistan	356000
Iran	328000
Others	6130000

11. Dubai has made itself a business hub and enjoys massive business tourism. Can Hyderabad emulate the Dubai model?

Suggestions for Hyderabad-

- Focus on Infrastructure development like wide and clean roads, Highways, Airports, Metro rails, Ports.
- As Hyderabad is a Hub of IT Companies which can make policies that attracts more peoples to work here.
- Hyderabad has a strategic Location where investors and Businessman can be attracted by Tax-friendly policies.
- Cultural Heritage, Food Festivals and International Film Festivals as they plays a major role in boosting the tourism .

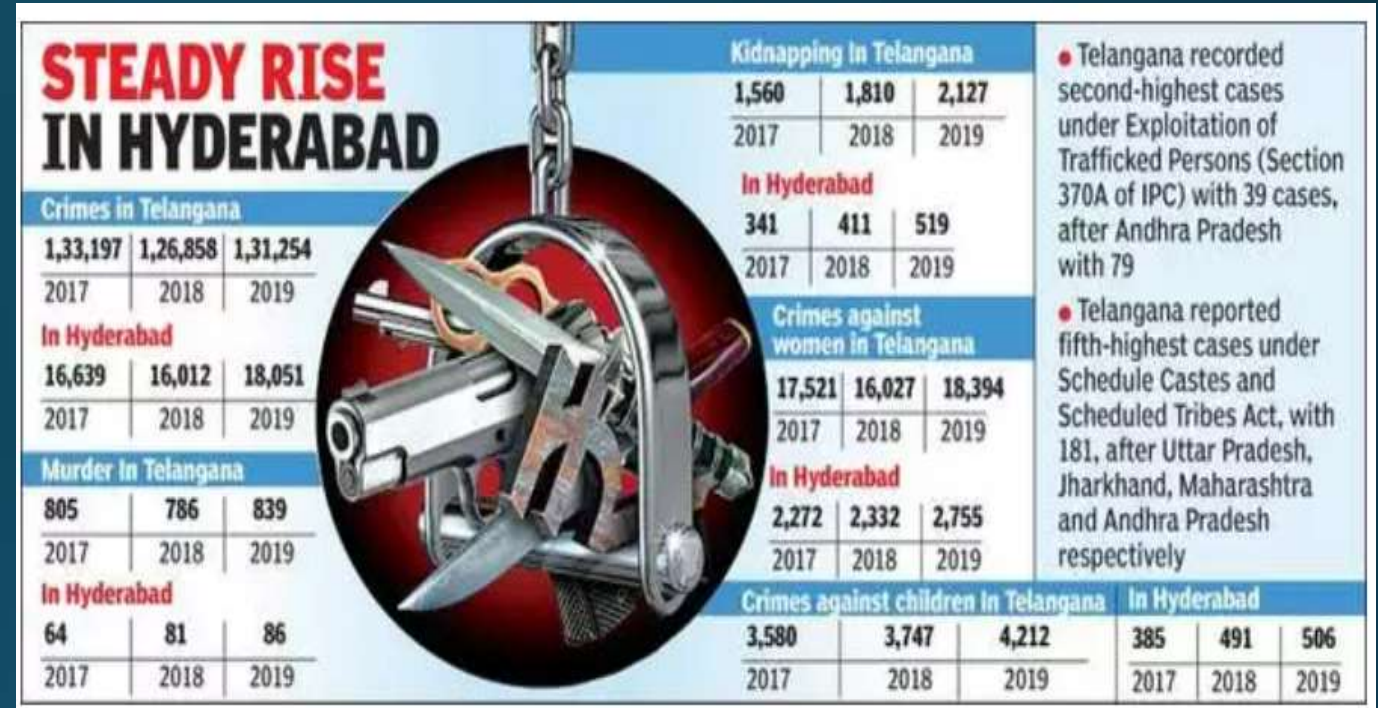


12. Provide all other recommendations that can boost the telangana tourism, particularly Hyderabad

- Hyderabad is rich in Culture and Art & Music therefore more Events should be organized here based on these during peak seasons.
- Hyderabad has historical monuments and forts which are the main attraction of Tourism providing their visit with an affordable tourist package and guide.
- Organizing Food festivals with a variety of options and tastes.
- Hyderabad has Film city can organize International Film Festivals as they plays a major role in boosting the tourism .
- Making use of Natural beauty can Introduce more waterfalls, wildlife parks, picnic spots.
- Sports Events can be organized on a large scale which attracts a large amount of visitors.
- Basic facilities like transportation facility, connectivity, Lodging facility, Hotels, Restaurants and Markets should be well maintained for providing a comfortable tourism.



Crime has a significant impact on the tourism industry. It can deter potential visitors from travelling to a destination, and can also negatively affect the reputation of a destination. This can lead to a decline in tourism numbers and a loss of revenue for businesses in the tourism industry.





Hemanand Vadivel



Dhavel Patel



K. T. Rama Rao
IT Minister of Telangana

THANK YOU