Hotels Dataset Analysis and Report

Data Summary

Tropical Monsoon Climate

- Has two types; TM Wet (Savannah)and TM Dry (Tropical Monsoon)
- Western Ghats, Malabar Coast, southern Assam, Lakshadweep, Andaman & Nicobar Islands
- Significant Rain, moderate to high temperatures
- May to November are wettest months
- Humid Summer from June to September

Tropical Dry

- Three types; tropical semi-arid (steppe), subtropical arid (desert), and subtropical semi-arid (steppe)
- Tropical semi-arid (steppe) found in Karnataka, Central MH, some parts of TN and Andhra Pradesh. Rainfall is unpredictable, March to May hot dry summers.
- Western RJ has subtropical arid (desert) climate with irregular and sparse ran.
- Sub-tropical Semi-Arid (Steppe) climate is present in tropical desert areas of Punjab and Haryana to Kathiawar (GJ). Summers can reach 40C and rains are unpredictable and fall in summers.
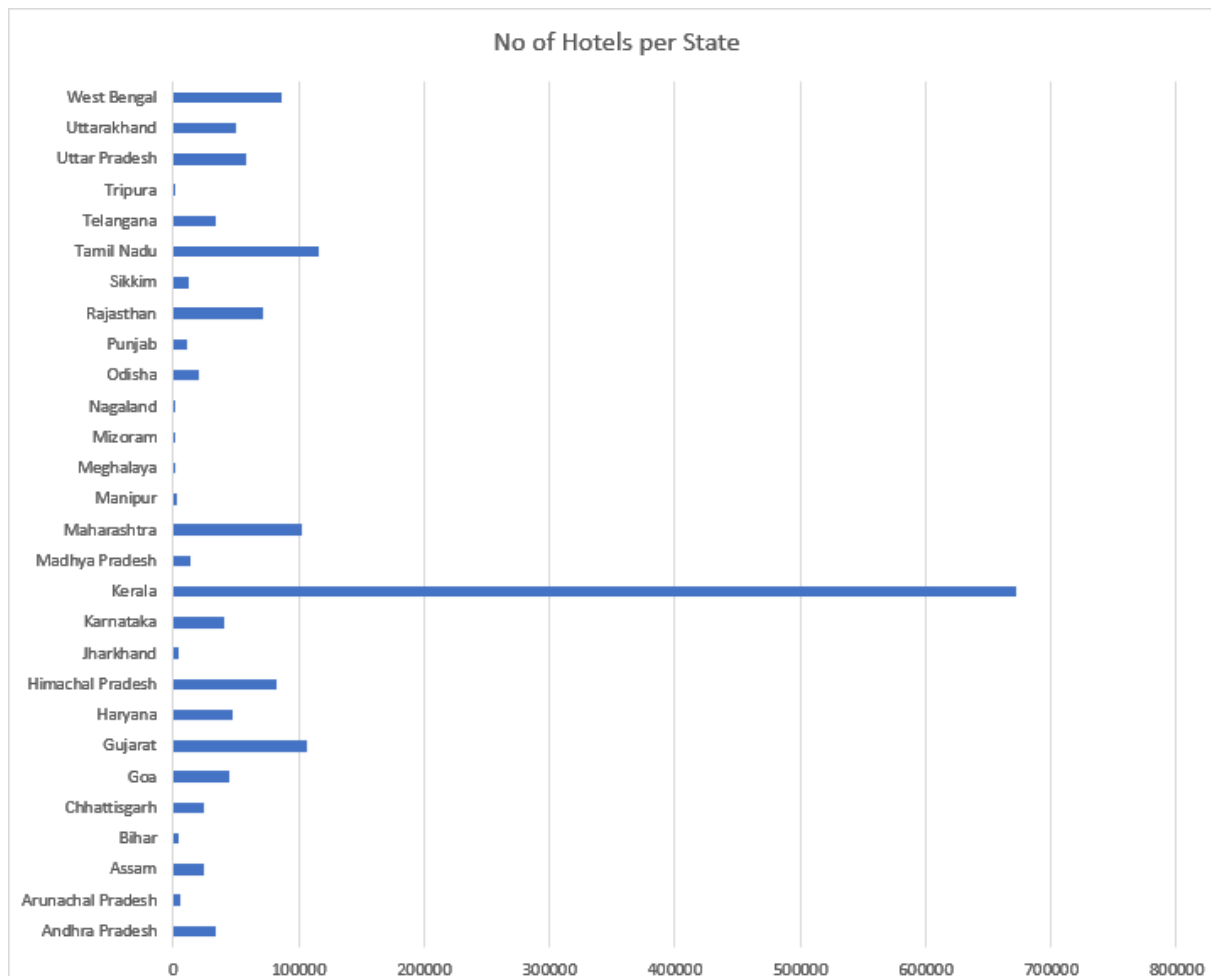
Subtropical Humid

- N and NE states, Quiet hot summers, Winters as low as 0C,
- Rain falls in summer mostly, some places have snowfall or sporadic rain throughout winter.
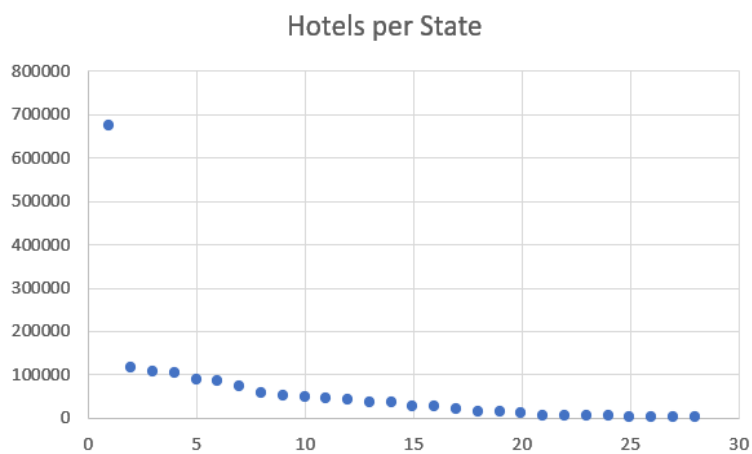- May and June are hottest
- Frost can be found in winters.

Mountain

- Temp drops 0.6C every 100m elevation in altitude, therefore climates range from tropical to tundra
- Trans Himalayas is chilly, dry and windswept. Leeward side gets less rain, exposed slopes get more.
- Dec through Feb see the most snowfall

Q1. Which state has the highest number of hotels? Depict this via a bar graph that compares all states.

We can see that Kerala has the highest number of hotels (67200). The number is exponentially larger than other entries. It is an outlier.

A simple scatter plot detects the outlier.

Q2. Which states have three types of climatic conditions? (convert the map, an unstructured data, to an Excel file in a structured format and mention the number of climates along with the state)
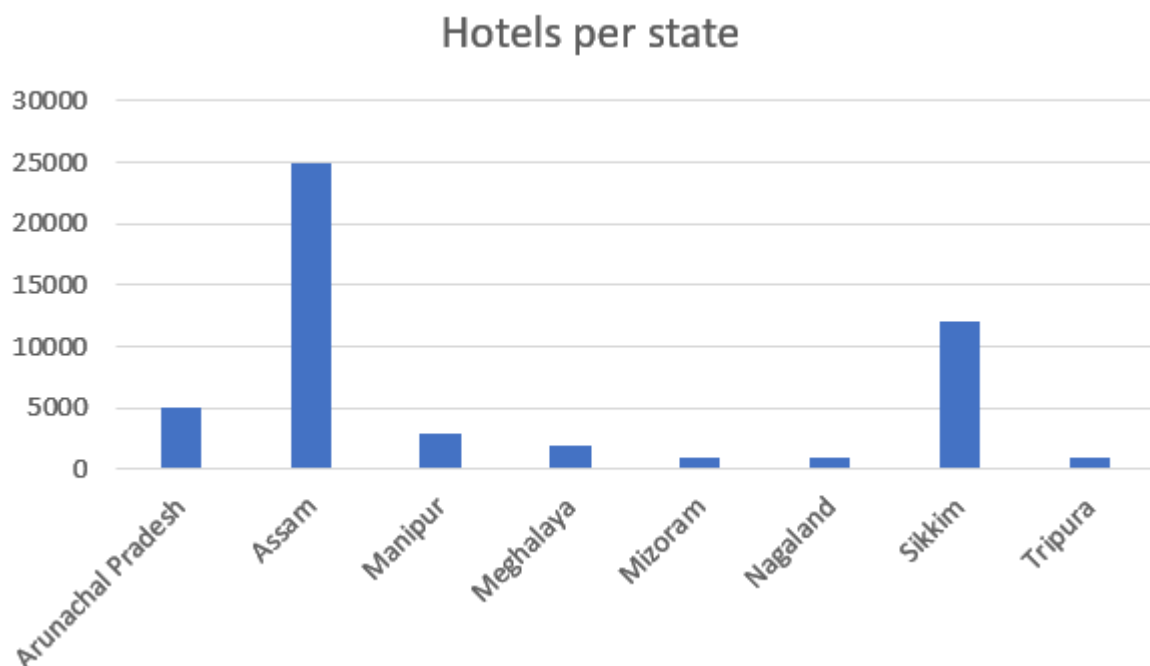
Serial	States	Climate	Climate count
1	Andhra Pradesh	Tropical Savannah, Steppe	2
2	Arunachal Pradesh	Mountain, Subtropical Humid	2
3	Assam	Subtropical Humid, Mountain	2
4	Bihar	Subtropical Humid	1
5	Chhattisgarh	Tropical Savannah, Subtropical Humid	2
6	Goa	Tropical Monsoon	1
7	Gujarat	Tropical Savannah, Steppe, Arid	3
8	Haryana	Subtropical Humid, Steppe, Arid	3
9	Himachal Pradesh	Mountain, Steppe, Subtropical Himud	3
10	Jharkhand	Subtropical Humid, Tropical Savannah	2
11	Karnataka	Tropical Savannah, Steppe, Tropical Monsoon	3
12	Kerala	Tropical Savannah, Steppe, Tropical Monsoon	3
13	Madhya Pradesh	Tropical Savannah, Steppe, Subtropical Humid	3
14	Maharashtra	Tropical Savannah, Steppe, Tropical Monsoon, Subtropical Humid	4
15	Manipur	Subtropical Humid	1
16	Meghalaya	Subtropical Humid	1
17	Mizoram	Subtropical Humid	1
18	Nagaland	Subtropical Humid	1
19	Odisha	Tropical Savannah, Subtropical Humid	2
20	Punjab	Steppe, Arid	2
21	Rajasthan	Steppe, Arid	2
22	Sikkim	Mountain	1
23	Tamil Nadu	Tropical Savannah, Steppe, Tropical Monsoon	3
24	Telangana	Tropical Savannah, Steppe	2
25	Tripura	Subtropical Humid	1
26	Uttar Pradesh	Subtropical Humid, Steppe	2
27	Uttarakhand	Subtropical Humid, Mountain	2
28	West Bengal	Tropical Savannah, Subtropical Humid, Mountain	3

There are 9 states having at least 3 climate situations, namely

1. Gujarat
2. Haryana
3. Himachal Pradesh
4. Karnataka
5. Kerala
6. Madhya Pradesh
7. Maharashtra
8. Tamil Nadu
9. West Bengal

Maharashtra has 4 climatic conditions.

Q3. Among the northeastern states which are best to set up a hotel? Use Clustered Column Chart and give recommendations for hotel industry investors.

Clustered Column Chart for Hotels per NE State

From the above Clustered chart, we can say that the best North-eastern states to set up hotels is Mizoram, Nagaland and Tripura, as they have the least number of hotels in their states. Assam has the highest number of hotels followed by Sikkim.

Tripura, Nagaland, Mizoram and Meghalaya are the states with the least number of hotels. They can be a good place to start investing. The hotel business in the northeast Indian states, including Assam, Meghalaya, and Arunachal Pradesh is profitable, considering a combination of factors. The regional rich cultural heritage, stunning natural beauty, and strategic location make it an attractive destination for tourists and business travellers.
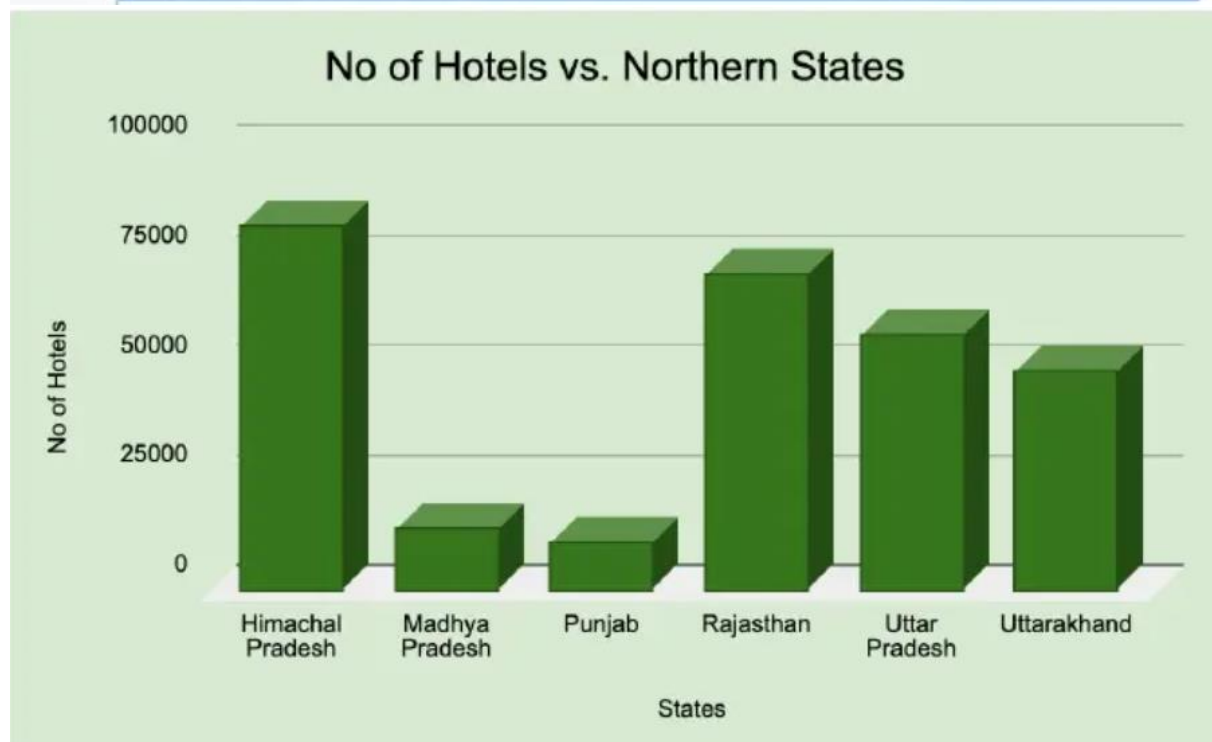
The growth of industries such as oil and gas, tea, and tourism has led to an increase in demand for quality accommodations, with many international chains setting up operations in the region. Additionally, government initiatives to promote tourism and infrastructure development have created a favourable business environment.

Q4. Customise the pivot charts to add/change the fields in the fields list with other fields and by using chart styles to customise the charts. (choose the data and parameters according to your choice)

	A	B	C
1	States	No of Hotels	
2	— Andhra Prad⋅	34000	
3	— Karnataka	40000	
4	— Kerala	672000	
5	— Tamil Nadu	116000	
6	— Telangana	34000	
7			

No of Hotels vs. Southern States

	A	B	C
1	*States*	*No of Hotels*	
2	Himachal Pradesh	83000	
3	Madhya Pradesh	14000	
4	Punjab	11000	
5	Rajasthan	72000	
6	Uttar Pradesh	58000	
7	Uttarakhand	50000	

No of Hotels vs. Northern States

Q5. Which is the best state for setting up a hotel? Why?

The best state to set up a hotel would be Maharashtra. It is the economic capital of the country with the highest part in GDP. The tourism rate is high and Maharashtra has topped a hospitality survey conducted by global hotel consultancy HVS, which ranked Delhi and Goa in the second and third places. The state has a large portion of Central India and is well connected to the northern and southern part of the country equally. There are all kinds of terrains found in Maharashtra as well. Each region has a rich history and regional culture, as well as eating practices.

As per the India Tourism Statistics-2022 report, Maharashtra had 43.57 million domestic tourists visiting and 190,000 foreign tourists in 2021, as against 39.23 million domestic tourists and 1.26 million foreign tourists in 2020.

Q6. What is the average number of days the rainy season lasts in Indian states?

From the given map of India, the bold red line and the green dotted line indicate the onset and retreat of monsoon respectively. The onset of monsoon starts in India around June 1 and ends around July 15, whereas the retreat of monsoon starts around September 1 and ends around October 15.

Hence the whole monsoon season (onset and retreat) lasts from June 1 to October 15, which is around 136 days. Hence, the average number of days the rainy season lasts in the Indian states is 136 days a year.