

## BA PROJECT-02

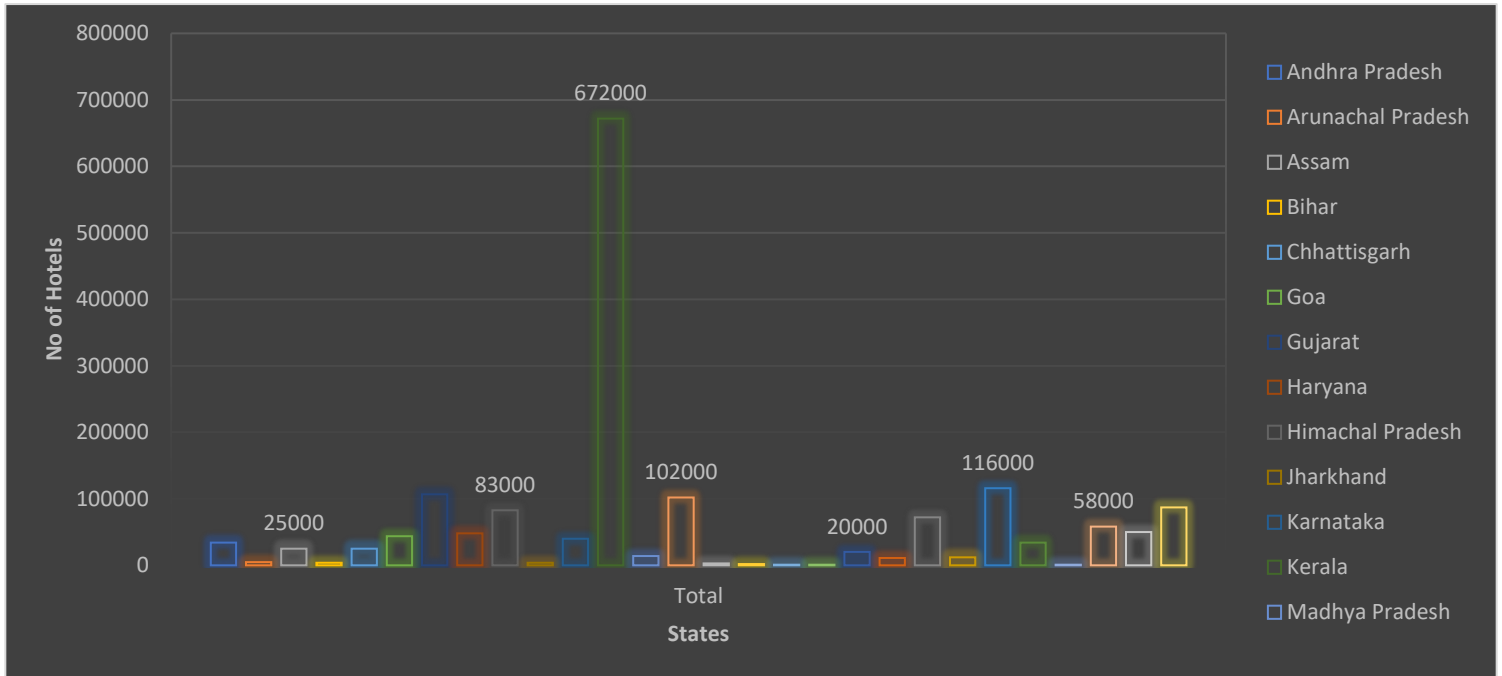
M.VISHNU PRIYA

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

A data set containing the list of states and number of hotels in a state is given:

States	No of Hotels
Andhra Pradesh	34000
Arunachal Pradesh	5000
Assam	25000
Bihar	4000
Chhattisgarh	25000
Goa	44000
Gujarat	107000
Haryana	48000
Himachal Pradesh	83000
Jharkhand	4000
Karnataka	40000
Kerala	672000
Madhya Pradesh	14000
Maharashtra	102000
Manipur	3000
Meghalaya	2000
Mizoram	1000
Nagaland	1000
Odisha	20000
Punjab	11000
Rajasthan	72000
Sikkim	12000
Tamil Nadu	116000
Telangana	34000
Tripura	1000
Uttar Pradesh	58000
Uttarakhand	50000
West Bengal	87000

**Plotting bar graph for depicting the highest number of hotels using Excel:**



From the above bar graph, by comparing all the states with respect to the number of hotels, we can clearly observe that “**Kerala**” has highest number of hotels with count of 672000.

**2. 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)**

An unstructured data is converted to a structured data in an Excel. The data consists of Number of Climates along with states.

States	Arid, Steppe, Hot	Tropical Savanna, wet & dry	Montane	humid sub-tropical	Tropical Monsoon	Hot Deserts, Arid	total no of climates
Andhra Pradesh	1	1	0	0	0	0	2
Arunachal Pradesh	0	0	1	1	0	0	2
Assam	0	0	1	1	0	0	2
Bihar	0	0	0	1	0	0	1
Chhattisgarh	0	1	0	1	0	0	2
Goa	0	0	0	0	1	0	1
Gujarat	1	0	0	1	0	1	3
Haryana	1	0	0	1	0	1	3
Himachal Pradesh	1	0	1	1	0	0	3
Jharkhand	0	1	0	1	0	0	2
Karnataka	0	1	0	0	1	0	2
Kerala	0	0	0	0	1	0	1
Madhya Pradesh	0	1	0	1	0	0	2
Maharashtra	1	1	0	0	1	0	3
Manipur	0	0	0	1	0	0	1
Meghalaya	0	0	0	1	0	0	1
Mizoram	0	0	0	1	0	0	1
Nagaland	0	0	0	1	0	0	1
Odisha	0	1	0	1	0	0	2
Punjab	1	0	0	1	0	1	3
Rajasthan	1	0	0	1	0	1	3
Sikkim	0	0	1	0	0	0	1
Tamil Nadu	1	1	0	0	1	0	3
Telangana	1	1	0	0	0	0	2
Tripura	0	0	0	1	0	0	1
Uttar Pradesh	1	0	0	1	0	0	2
Uttarakhand	0	0	1	1	0	0	2
West Bengal	0	1	0	1	0	0	2

From the above data we can infer that:

The states with 3 types of climatic conditions are:

**“Gujrat, Haryana, Himachal Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu”**

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

The North Eastern states in India are: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.

Best place to set up a hotel depends on the various factors such as climate, tourism potential, infrastructure.

#### **Climatic conditions:**

From the clustered data, we can see that the majority of northeastern states experiences the humid subtropical climate.

Summers are quite hot, and winters can see temperatures as low as 0°C. The majority of the time, rain falls in the summer, however certain places also have snowfall or sporadic rain throughout the winter. The hottest months are May and June, while frost can sometimes be found in the winter for a few months.

Tourism:

#### **Recommendations for hotel industry investors:**

##### **Assam:**

Assam is the largest state in the Northeast and offers a diverse range of attractions. It is known for its tea gardens, wildlife sanctuaries like Kaziranga National Park, and the mighty Brahmaputra River. The state has seen significant growth in tourism infrastructure in recent years, making it an attractive location for hotel investments. Guwahati, the capital city, is a hub for business and tourism and offers ample opportunities for hotel development. This state has highest number of hotels among the north eastern states.

**Sikkim:** Sikkim is known for its picturesque landscapes, including the stunning Kanchenjunga Mountain range. It attracts a significant number of tourists who come for adventure activities,

trekking, and exploring its natural beauty. The state has been actively promoting tourism and has good infrastructure. After Assam, this state has the highest number of hotels. It is more profitable to set up a hotel especially in popular destinations like Gangtok and Pelling.

**Arunachal Pradesh:** Arunachal Pradesh is known as the "Land of the Rising Sun" and is blessed with stunning landscapes, snow-capped mountains, and diverse tribal cultures. It offers opportunities for adventure tourism, including trekking, river rafting, and wildlife exploration. Though the state is relatively less developed in terms of tourism infrastructure, it has enormous untapped potential. Developing hotels in key locations like Tawang and Itanagar can result in the growing number of tourists visiting the state.

**Meghalaya:** Meghalaya is famous for its breathtaking landscapes, waterfalls, and living root bridges. It attracts nature lovers, adventure enthusiasts, and cultural explorers. Shillong, the capital city, is a popular tourist destination and a major educational hub. With the growth of tourism in Meghalaya, there is a demand for quality accommodations. Investing in hotels in Shillong and other prominent tourist spots in the state can be a profitable venture.

**Nagaland:** Nagaland is renowned for its vibrant tribal culture, festivals, and scenic beauty. The state has been making efforts to promote tourism and has witnessed a gradual increase in visitor arrivals. Kohima, the capital city, hosts the Hornbill Festival, which attracts tourists from around the world. Investing in hotels in Nagaland can be a strategic move to capitalize on the growing interest in the state's unique cultural heritage.

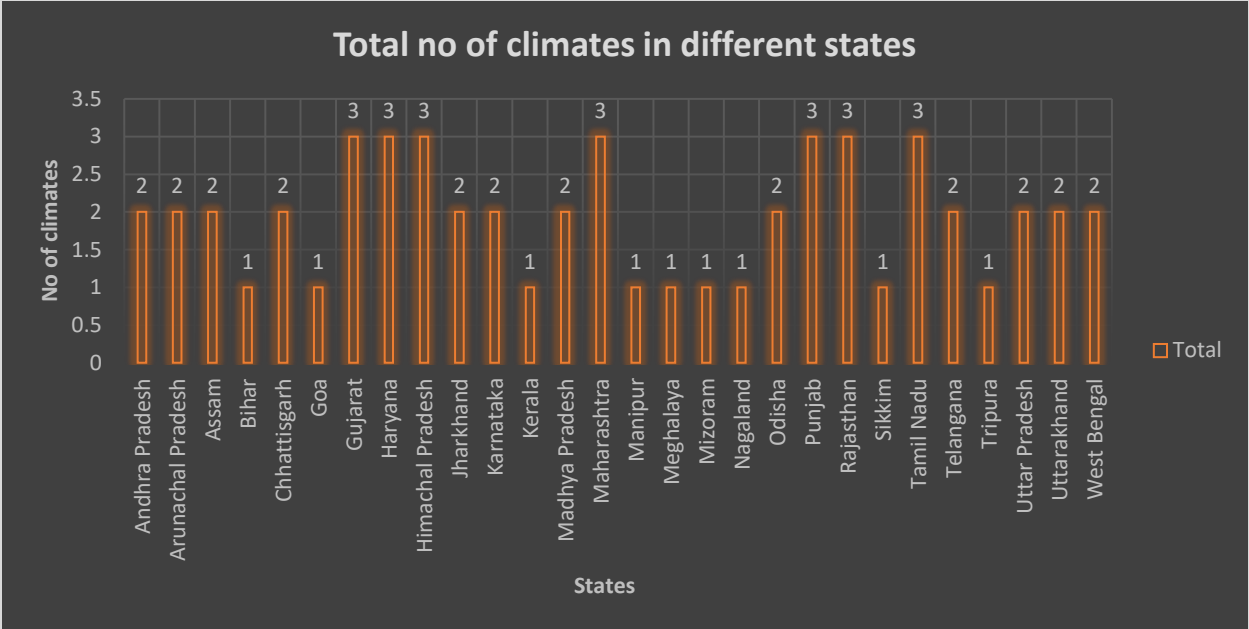
Apart from this, there are some other factors such as market demand, competition, local regulations, and target customer segments should be carefully considered.

Considering all the factors, **Assam, Sikkim, Arunachal Pradesh, Meghalaya and Nagaland** are best places to set up a hotel.

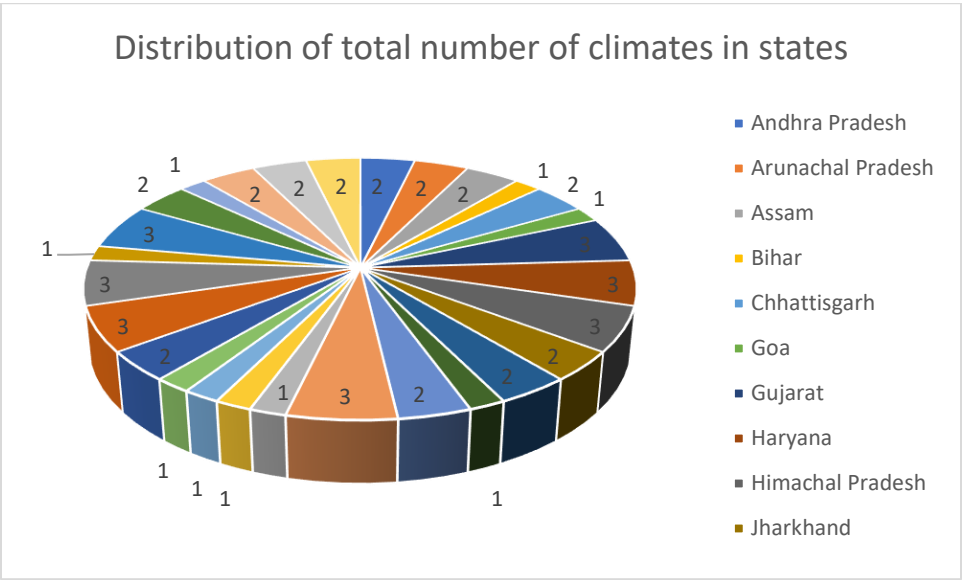
**4. Customize the pivot charts to add/change the fields in the fields list with other fields and by using chart styles to customize the charts. (Choose the data and parameters according to your choice)**

Here are different types of pivot chart plotted.

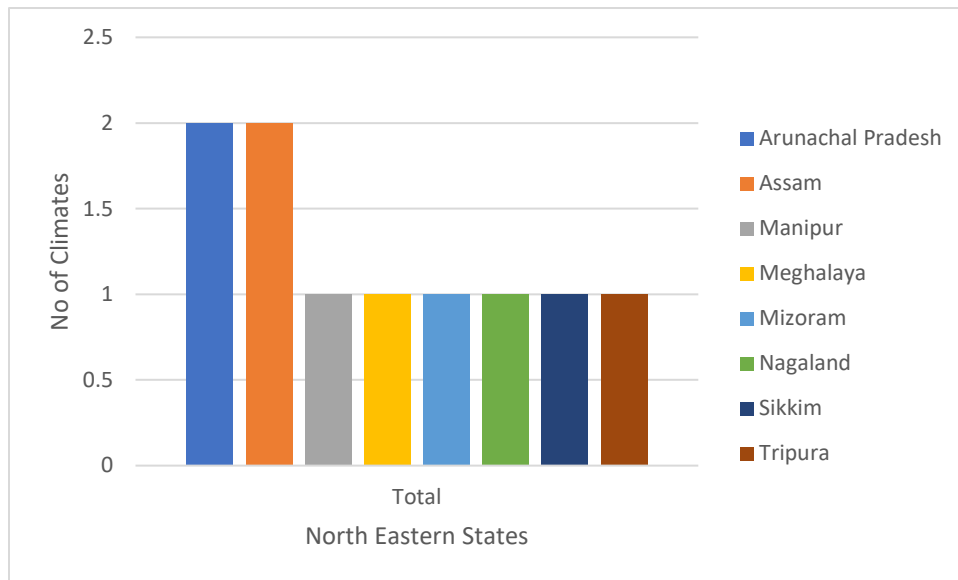
**1. Based on number of climates in states:**



Showing the same in pie chart:



### 3. Distribution of total no of climates in northeastern states:



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

Determining the best states for setting up a hotel in India depends on various factors such as including climate, tourism potential, economic development, infrastructure, connectivity, and government support. Based on these criteria, the following states are considered among the best for hotel investments:

**Kerala:** Kerala, often referred to as "God's Own Country," is known for its scenic backwaters, lush greenery, and Ayurvedic wellness retreats. It attracts tourists seeking tranquility and rejuvenation. Key tourist destinations in Kerala include Kochi, Munnar, Alleppey, and Thiruvananthapuram. The state offers a range of accommodation options, including luxury resorts, homestays, and houseboats. Kerala experiences mostly the climate of tropical monsoon with seasonally excessive rainfall.

Kerala has a highest number of hotels, so setting up a hotel here is more profitable.

**Goa:** Goa is a renowned beach destination in India, attracting millions of tourists every year. It offers a vibrant nightlife, water sports, and a relaxed coastal atmosphere. With its beautiful beaches, Goa provides ample opportunities for setting up beachfront resorts, luxury hotels, and boutique accommodations. The state's tourism-friendly policies and well-developed infrastructure make it a favorable location for hotel investments.

**Karnataka:** Karnataka is a diverse state with a mix of historical sites, wildlife sanctuaries, hill stations, and urban centers like Bengaluru and Mysore. It attracts both leisure and business travelers, providing a robust market for hotels. The state's well-connected airports, extensive road networks, and favorable business environment make it an attractive destination for hotel investments. The tropical semi-arid (steppe) climate is found in Karnataka. Considering all the factors, Karnataka is also one of the best places for setting up a hotel.

**Rajasthan:** Rajasthan is known for its rich history, royal heritage, and vibrant culture. The state attracts a significant number of domestic and international tourists who come to explore its magnificent palaces, forts, and diverse landscapes. Cities like Jaipur, Udaipur, Jodhpur, and Jaisalmer offer tremendous potential for hotel investments due to the high influx of tourists. The state government also provides support through policies and incentives to promote tourism.

Rajasthan experiences a subtropical arid (desert) climate with irregular and sparse rainfall. Though the climatic conditions are not good, this place is preferred for setting up a hotel.

By considering all the parameters “**Kerala, Goa, Karnataka, Maharashtra, Rajasthan**” are best places to set up a hotel.

## **6. What is the average number of days the rainy season lasts in Indian states?**

For determining the average number of days, the rainy season lasts in India we can refer the Indian map given in the question, in which the onset and retreat of south west monsoon were mentioned with the dates.

- From June 5th to October 15th = 137 days
- From June 10th to October 1st = 114 days
- From June 15th to September 15th = 92 days



- From July 1st to September 1st = 63 days So, on an average the rainy season lasts for almost (102) 100 days.