```python
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import plotly.express as px
%matplotlib inline
```

```python
datas=pd.read_csv("Unemployment_Rate_upto_11_2020.csv")
```

```python
datas.head() # descending
```

	Region	Date	Frequency	Estimated Unemployment Rate (%)	Estimated Employed	Estimated Labour Participation Rate (%)	Region.1	longitude	latitude
0	Andhra Pradesh	31-01-2020	M	5.48	16635535	41.02	South	15.9129	79.74
1	Andhra Pradesh	29-02-2020	M	5.83	16545652	40.90	South	15.9129	79.74
2	Andhra Pradesh	31-03-2020	M	5.79	15881197	39.18	South	15.9129	79.74
3	Andhra Pradesh	30-04-2020	M	20.51	11336911	33.10	South	15.9129	79.74
4	Andhra Pradesh	31-05-2020	M	17.43	12988845	36.46	South	15.9129	79.74

```
In [35]: datas.tail() # reverse
```

Out[35]:

	Region	Date	Frequency	Estimated Unemployment Rate (%)	Estimated Employed	Estimated Labour Participation Rate (%)	Region.1	longitude	latitude
262	West Bengal	30-06-2020	M	7.29	30726310	40.39	East	22.9868	87.855
263	West Bengal	31-07-2020	M	6.83	35372506	46.17	East	22.9868	87.855
264	West Bengal	31-08-2020	M	14.87	33298644	47.48	East	22.9868	87.855
265	West Bengal	30-09-2020	M	9.35	35707239	47.73	East	22.9868	87.855
266	West Bengal	31-10-2020	M	9.98	33962549	45.63	East	22.9868	87.855

```
In [51]: datas.isnull().sum() # finding null value according to field
```

Out[51]:
```
Region                                      0
Date                                        0
Frequency                                   0
Estimated Unemployment Rate (%)             0
Estimated Employed                          0
Estimated Labour Participation Rate (%)     0
Region.1                                    0
longitude                                   0
latitude                                    0
dtype: int64
```

```
In [42]: datas.isnull().sum().sum() # finding null values in table
```

Out[42]: 0

```
In [11]: datas.fillna(method='pad') # filling empty rows with  previous value
```

Out[11]:

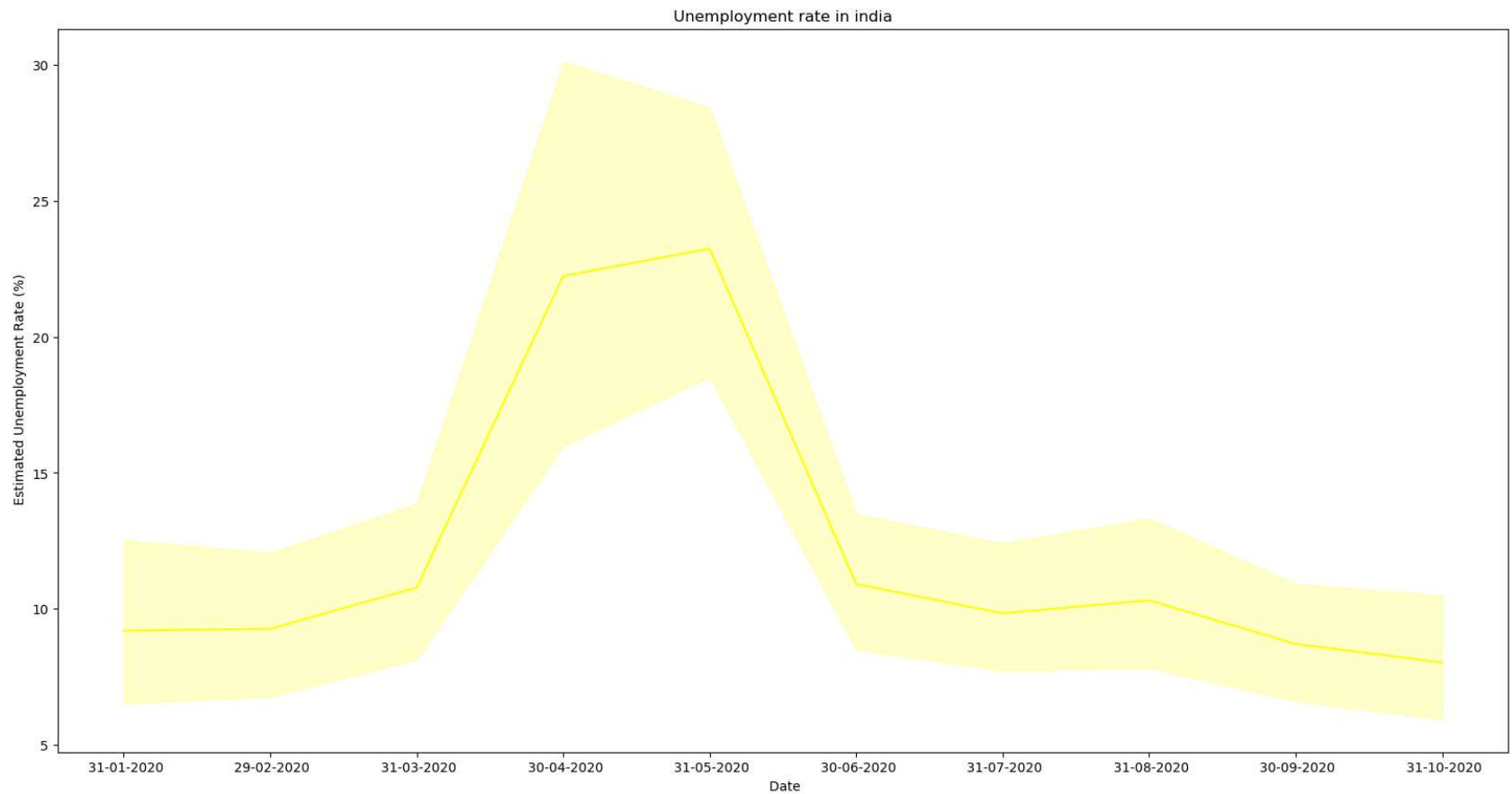|	Region	Date	Frequency	Estimated Unemployment Rate (%)	Estimated Employed	Estimated Labour Participation Rate (%)	Region.1	longitude	latitude
0	Andhra Pradesh	31-01-2020	M	5.48	16635535	41.02	South	15.9129	79.740
1	Andhra Pradesh	29-02-2020	M	5.83	16545652	40.90	South	15.9129	79.740
2	Andhra Pradesh	31-03-2020	M	5.79	15881197	39.18	South	15.9129	79.740
3	Andhra Pradesh	30-04-2020	M	20.51	11336911	33.10	South	15.9129	79.740
4	Andhra Pradesh	31-05-2020	M	17.43	12988845	36.46	South	15.9129	79.740
...	...	...	...	...	...	...	...	...	...
262	West Bengal	30-06-2020	M	7.29	30726310	40.39	East	22.9868	87.855
263	West Bengal	31-07-2020	M	6.83	35372506	46.17	East	22.9868	87.855
264	West Bengal	31-08-2020	M	14.87	33298644	47.48	East	22.9868	87.855
265	West Bengal	30-09-2020	M	9.35	35707239	47.73	East	22.9868	87.855
266	West Bengal	31-10-2020	M	9.98	33962549	45.63	East	22.9868	87.855

267 rows × 9 columns

```
In [43]: datas.columns.tolist() #  tot fields
```

Out[43]: ['Region',
' Date',
' Frequency',
' Estimated Unemployment Rate (%)',
' Estimated Employed',
' Estimated Labour Participation Rate (%)',
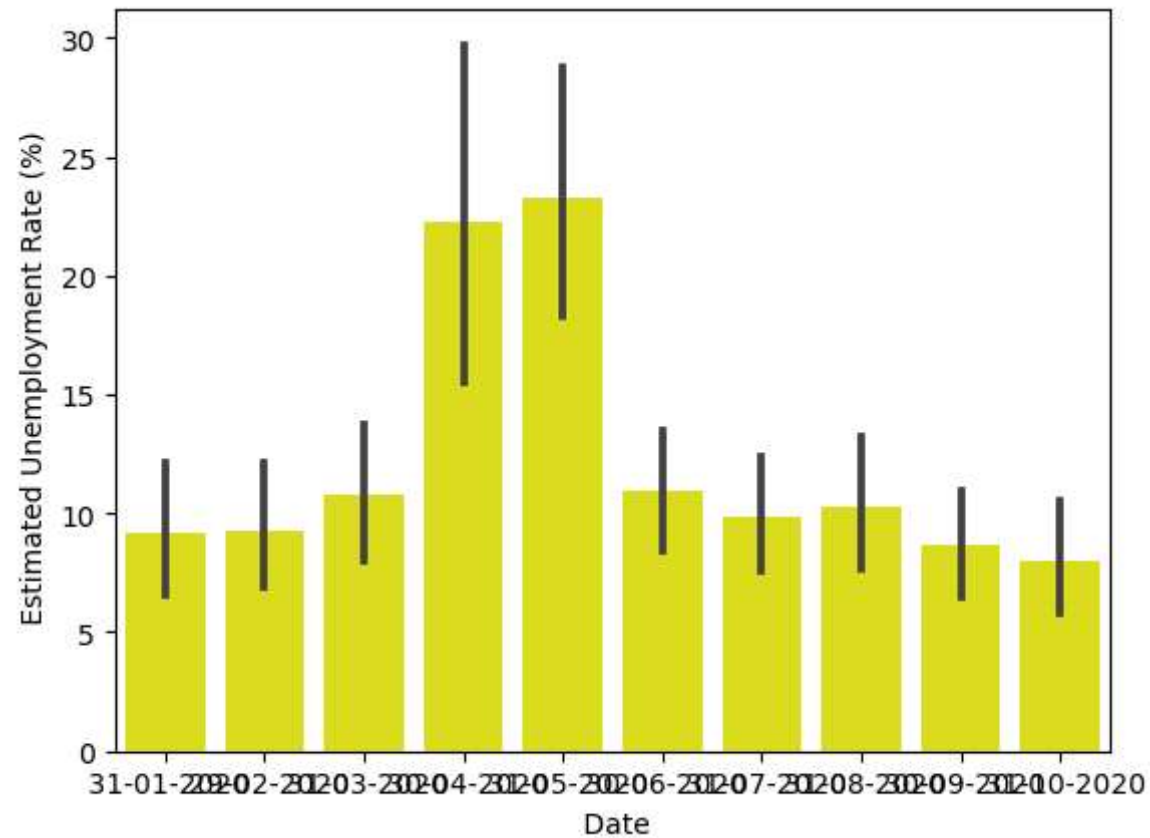'Region.1',
'longitude',
'latitude']

```
plt.figure(figsize=(20,10)) #Unemployment rate in india
sns.lineplot(data=datas,x= ' Date',y=' Estimated Unemployment Rate (%)',color='yellow')
plt.title("Unemployment rate in india")
```

Text(0.5, 1.0, 'Unemployment rate in india')

```
In [55]: sns.barplot(data=datas,x=' Date',y=' Estimated Unemployment Rate (%)',color='yellow')
```

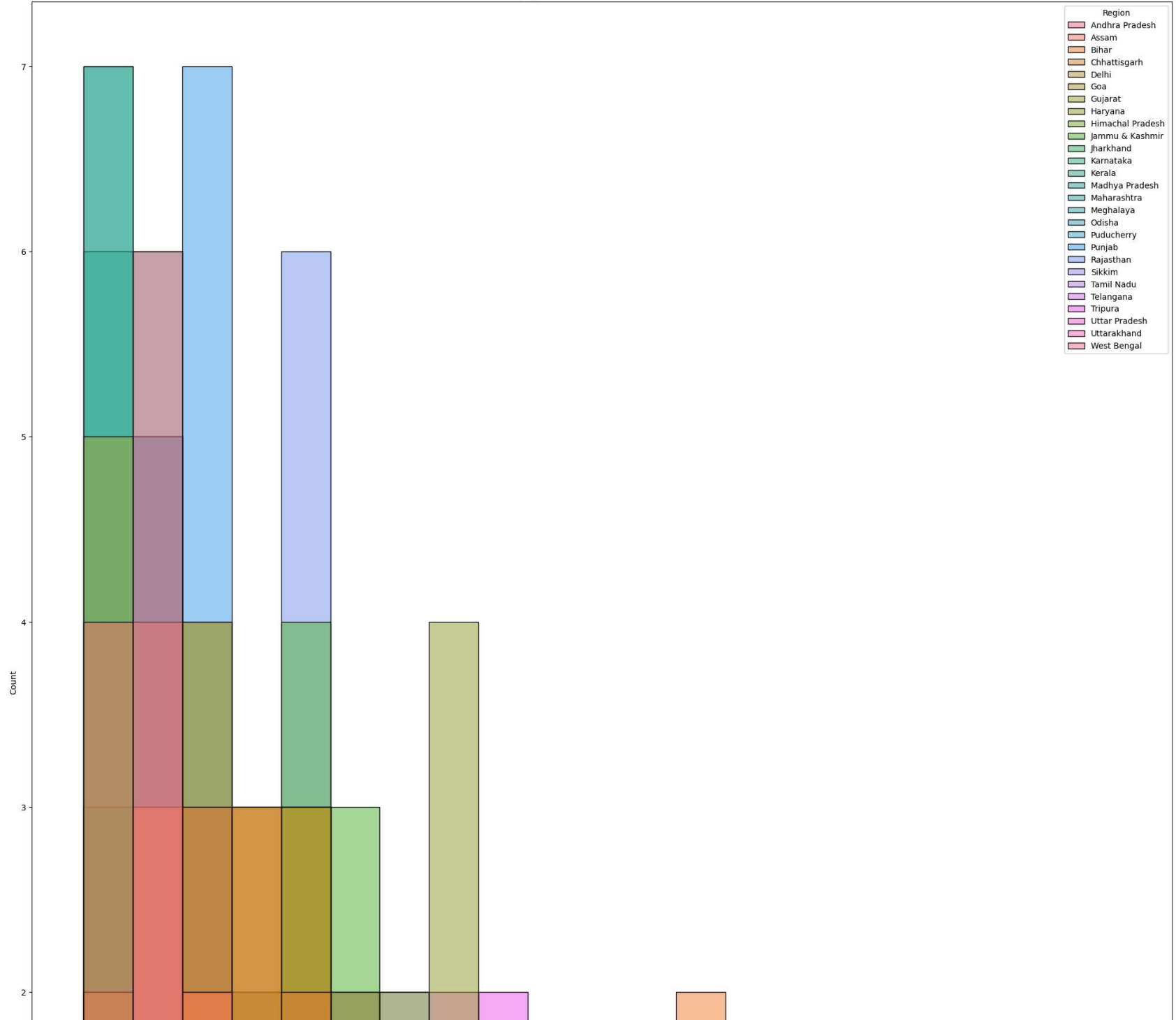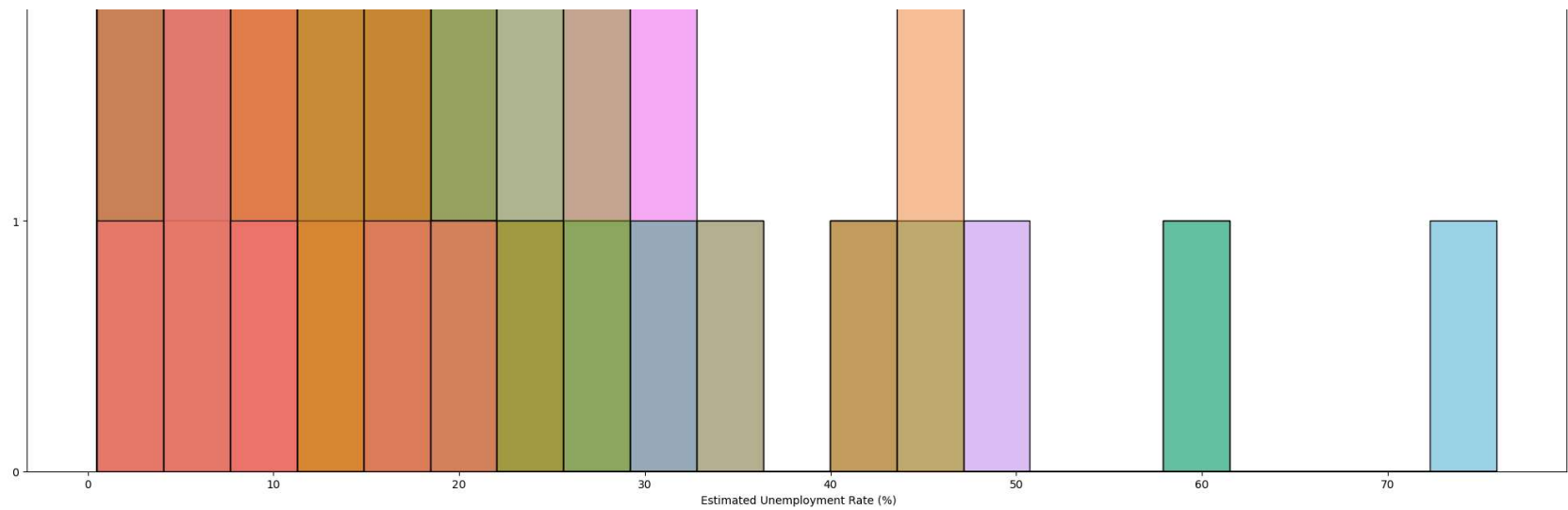Out[55]: `<Axes: xlabel=' Date', ylabel=' Estimated Unemployment Rate (%)'>`

```
In [63]: plt.figure(figsize=(25,30)) #histplot
         datas.columns=('Region', ' Date', ' Frequency', ' Estimated Unemployment Rate (%)', ' Estimated Employed', ' E
         plt.title("Unemployment in India Rural and Urban Area")
         sns.histplot(x=' Estimated Unemployment Rate (%)',hue='Region',data=datas)
         plt.show()
```
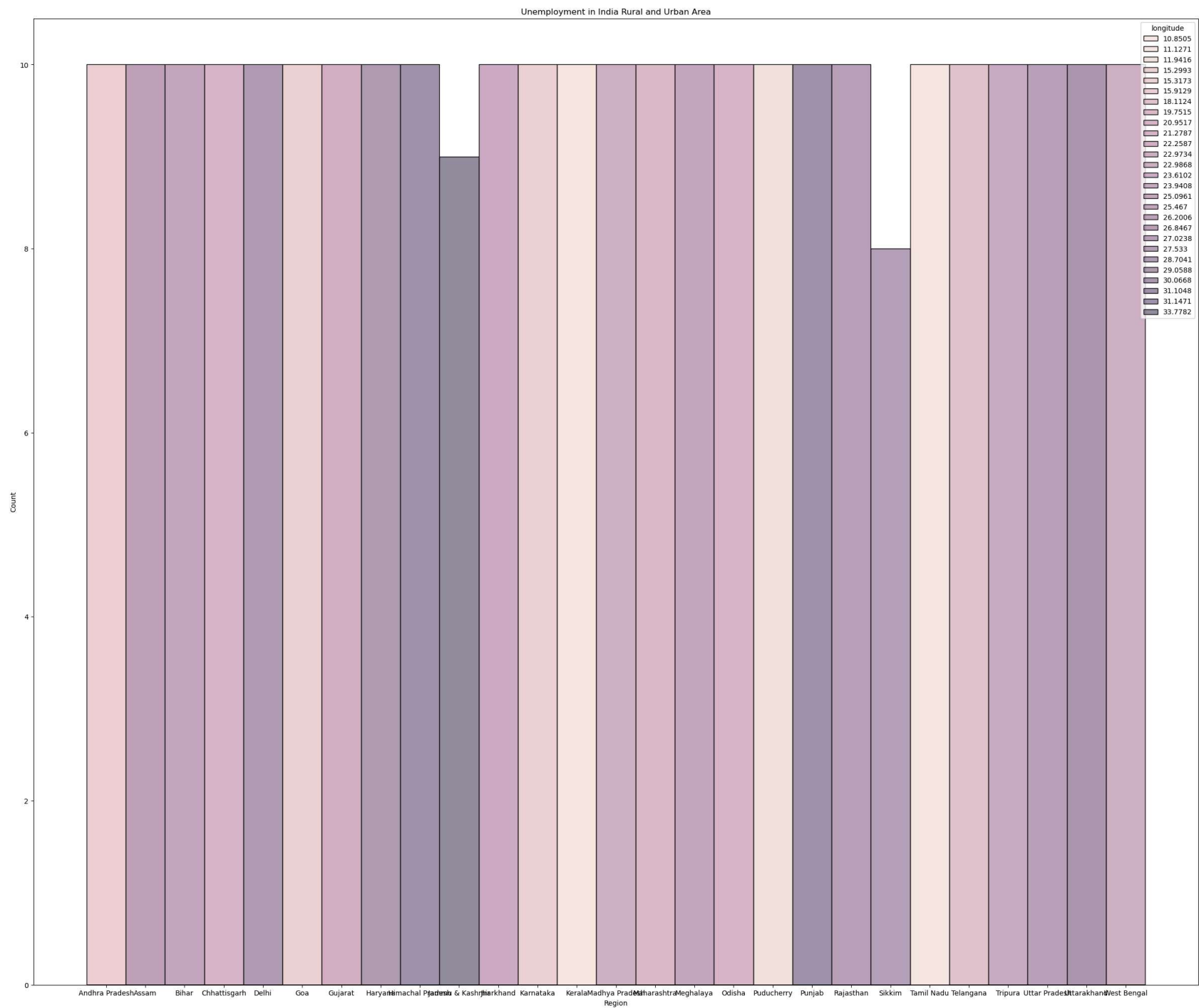
Unemployment in India Rural and Urban Area

Estimated Unemployment Rate (%)

```
In [67]: plt.figure(figsize=(30,25)) #histplot
         datas.columns=('Region', ' Date', ' Frequency', ' Estimated Unemployment Rate (%)', ' Estimated Employed', ' E
         plt.title("Unemployment in India Rural and Urban Area")
         sns.histplot(x='Region',hue='longitude',data=datas)
         plt.show()
```

Unemployment in India Rural and Urban Area

```
In [72]: sns.heatmap(datas.corr(),annot=True) #heatmap
```

C:\Users\DB Tech\AppData\Local\Temp\ipykernel_5780\1653070210.py:1: FutureWarning: The default value of numer
ic_only in DataFrame.corr is deprecated. In a future version, it will default to False. Select only valid col
umns or specify the value of numeric_only to silence this warning.
  sns.heatmap(datas.corr(),annot=True)

Out[72]: <Axes: >