

In [19]:

```
import numpy as np
from math import pi
import pandas as pd
from matplotlib import pyplot as plt
%matplotlib inline

data=pd.read_csv("D:\covid-19-india.csv")
data.tail(5)
```

Out[19]:

	Sno	Date	Time	State/UnionTerritory	ConfirmedIndianNational	ConfirmedForeignNatio
4246	4247	18-07-2020	08:00 AM	Tripura	-	
4247	4248	18-07-2020	08:00 AM	Uttarakhand	-	
4248	4249	18-07-2020	08:00 AM	Uttar Pradesh	-	
4249	4250	18-07-2020	08:00 AM	West Bengal	-	
4250	4251	18-07-2020	08:00 AM	Cases being reassigned to states	-	

In [3]:

```
data.shape
data.isnull().sum()
```

Out[3]:

```
Sno          0
Date          0
Time          0
State/UnionTerritory  0
ConfirmedIndianNational  0
ConfirmedForeignNational  0
Cured         0
Deaths        0
Confirmed     0
dtype: int64
```

In [4]:

```
data.groupby(['Date'])['Confirmed','Cured','Deaths','State/UnionTerritory'].max()
```

Out[4]:

	Confirmed	Cured	Deaths	State/UnionTerritory
Date				
01-02-2020	2	0	0	Kerala
01-03-2020	3	0	0	Kerala
01-04-2020	302	39	9	West Bengal
01-05-2020	10498	1773	459	West Bengal
01-06-2020	67655	29329	2286	West Bengal
...
30-05-2020	62228	26997	2098	West Bengal
30-06-2020	169883	88960	7610	West Bengal
31-01-2020	1	0	0	Kerala
31-03-2020	234	39	9	West Bengal
31-05-2020	65168	28081	2197	West Bengal

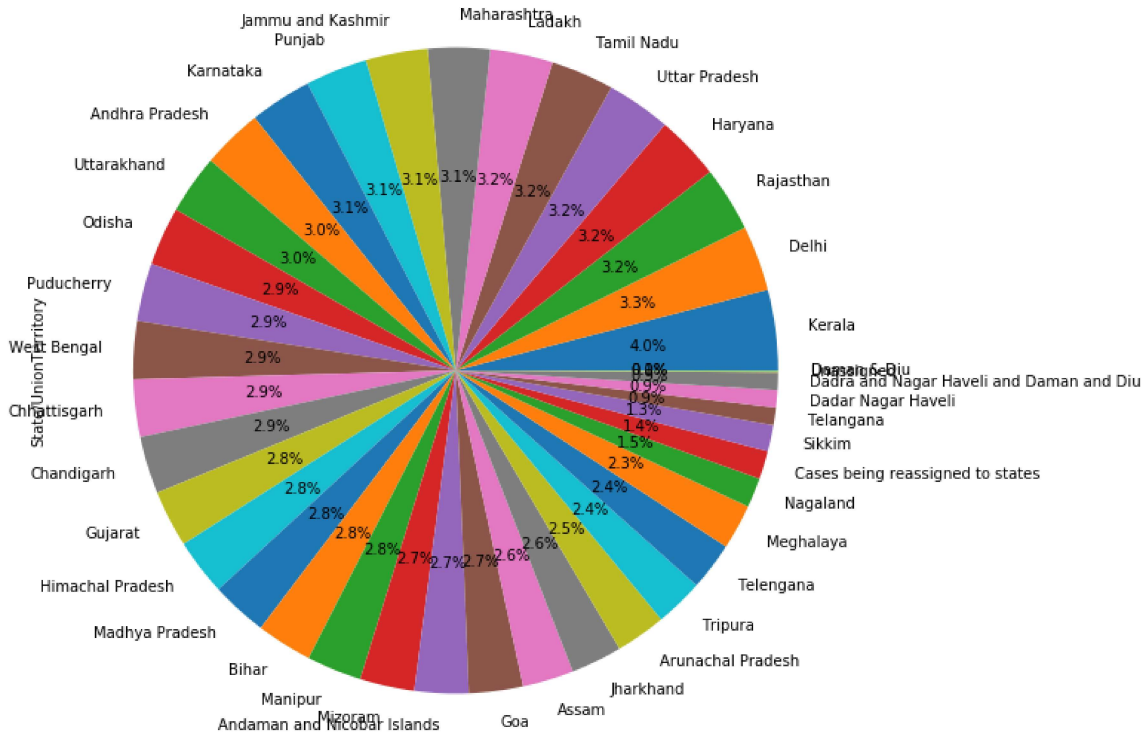
171 rows × 4 columns

In [5]:

```
plt.figure(figsize=(20,10))
data['State/UnionTerritory'].value_counts().plot.pie(autopct='%1.1f%%')
```

Out[5]:

<matplotlib.axes._subplots.AxesSubplot at 0x257d5962c48>



In [6]:

```
covid_per_day=data.groupby(['Date'])['Confirmed','Cured','Deaths'].max()
covid_per_day
```

Out[6]:

	Confirmed	Cured	Deaths
Date			
01-02-2020	2	0	0
01-03-2020	3	0	0
01-04-2020	302	39	9
01-05-2020	10498	1773	459
01-06-2020	67655	29329	2286
...
30-05-2020	62228	26997	2098
30-06-2020	169883	88960	7610
31-01-2020	1	0	0
31-03-2020	234	39	9
31-05-2020	65168	28081	2197

171 rows × 3 columns

In [29]:

```
covid_per_day['Confirmed'].max()
```

Out[29]:

292589

In [30]:

```
covid_per_day['Confirmed'].idxmax()
```

Out[30]:

'18-07-2020'

In [31]:

```
covid_per_day['Confirmed'].idxmin()
```

Out[31]:

'30-01-2020'

In [32]:

```
data['State/UnionTerritory'].value_counts()
```

Out[32]:

Kerala	171
Delhi	139
Rajasthan	138
Uttar Pradesh	137
Haryana	137
Tamil Nadu	134
Ladakh	134
Maharashtra	132
Karnataka	132
Jammu and Kashmir	132
Punjab	132
Andhra Pradesh	129
Uttarakhand	126
Odisha	125
Puducherry	123
West Bengal	123
Chhattisgarh	122
Chandigarh	122
Gujarat	121
Madhya Pradesh	120
Himachal Pradesh	120
Bihar	119
Manipur	117
Mizoram	116
Goa	115
Andaman and Nicobar Islands	115
Assam	109
Jharkhand	109
Arunachal Pradesh	107
Tripura	103
Telangana	102
Meghalaya	96
Nagaland	63
Cases being reassigned to states	60
Sikkim	56
Dadar Nagar Haveli	37
Telangana	37
Dadra and Nagar Haveli and Daman and Diu	37
Unassigned	3
Daman & Diu	1

Name: State/UnionTerritory, dtype: int64

In [33]:

```
data.describe()
```

Out[33]:

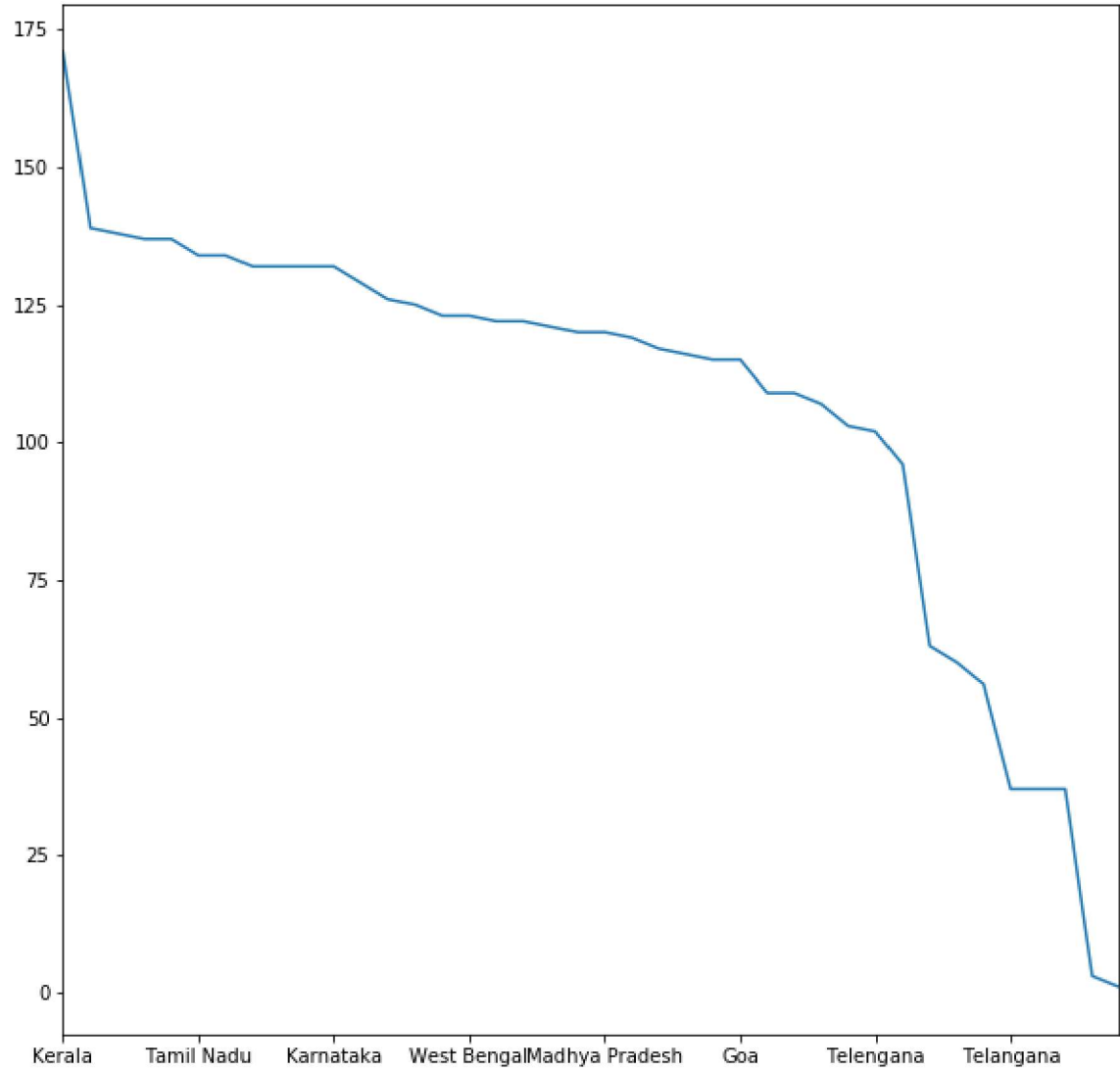
	Sno	Cured	Deaths	Confirmed
count	4251.000000	4251.000000	4251.000000	4251.000000
mean	2126.000000	3700.771113	190.635380	6631.299929
std	1227.302326	12863.028527	826.647385	22204.574771
min	1.000000	0.000000	0.000000	0.000000
25%	1063.500000	4.000000	0.000000	33.000000
50%	2126.000000	87.000000	3.000000	400.000000
75%	3188.500000	1641.000000	42.000000	3423.000000
max	4251.000000	160357.000000	11452.000000	292589.000000

In [13]:

```
plt.figure(figsize=(10,10))  
data['State/UnionTerritory'].value_counts().plot()
```

Out[13]:

<matplotlib.axes._subplots.AxesSubplot at 0x257d5edd288>

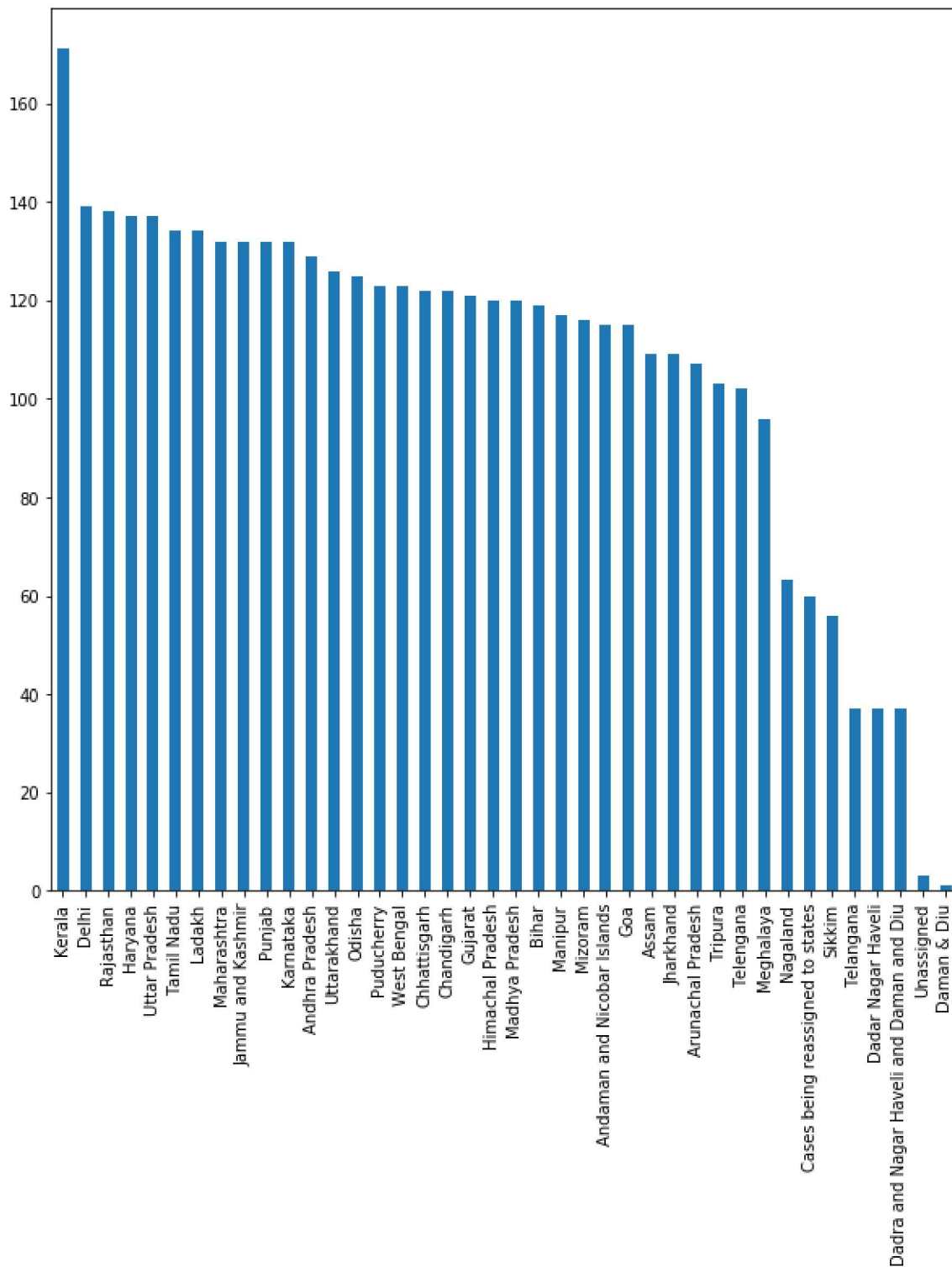


In [15]:

```
plt.figure(figsize=(10,10))  
data['State/UnionTerritory'].value_counts().plot.bar()
```

Out[15]:

<matplotlib.axes._subplots.AxesSubplot at 0x257d5fa94c8>



In []:

In []: