

The EDUCATION SYSTEM OF TAMILNADU

INTRODUCTION -

A Project to Visualise schools in Tamilnadu and some basic information on them

I believe the Education system of any community / Society decides the quality in everything else.

My very ambition is to fight Social Evils by rDAevolutionising our Education system. Hence, I am using data on Schools in Tamilnadu, their types, Enrolment numbers gender wise, Management type wise etc., to get a basic idea of the Education System and visualise it on the map.

I am about to do this using the Data I've obtained from the Tamilnadu Government Website.

I propose this Project to be useful to Social Activists. I know a few people like my friend who is a Law student, another one who is a Social worker etc.. to get benefited by this project

The DATA

I am not using Foursquare API data because for most of the Queries we only get "Too generic Area, not much of Venues present. Try a different one with more popularity". Geocoder doesn't Respond at all, hence downloaded the coordinates file.

I have collected the following data regarding schools in Tamilnadu, District wise:

- 1) Enrolment in Management Type – Government, Private or Private Aided (Private but aided

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[5]: gender.head()
```

[5]:	S.No	District	Govt Boys	Govt Girls	Govt Total	Private Aided Boys	Private Aided Girls	Private Aided Total	Private Unaided Boys	Private Unaided Girls	Private Unaided Total	Grand Total Boys	Grand Total Girls	Grand Total
0	1	ARIYALUR	37475	36642	74117	8822	12524	21346	20453	14783	35236	66750	63949	130699
1	2	CHENNAI	45046	54260	99306	80197	93383	173580	244490	222777	467267	369733	370420	740153
2	3	COIMBATORE	79306	85899	165205	34089	40627	74716	170440	154029	324469	283835	280555	564390
3	4	CUDDALORE	88116	96313	184429	37567	38850	76417	106990	81252	188242	232673	216415	449088
4	5	DHARMAPURI	80521	85207	165728	2763	1974	4737	58802	43665	102467	142086	130846	272932

by Government)

- 2) Enrolment in School Level – Primary, Middle or High School
- 3) Enrolment Gender wise
- 4) Teacher Strength
- 5) Latitude and Longitude coordinates of each District

Cleaning Data

```
17]: location['Latitude']=location['Latitude'].str.replace("' N'", "")
location.head()
```

```
17]:
```

	Location	Latitude	Longitude
0	Adirampattinam	10.21	79° 25' E
1	Ambasamudram	8.43	77° 29' E
2	Ambur	21.50	78° 45' E
3	Anaimalai Hills	10.24	76° 40' E
4	Arakkonam	13.05	79° 43' E

```
23]: location['Longitude']=location['Longitude'].str.replace("'°", ".")
location.head()
```

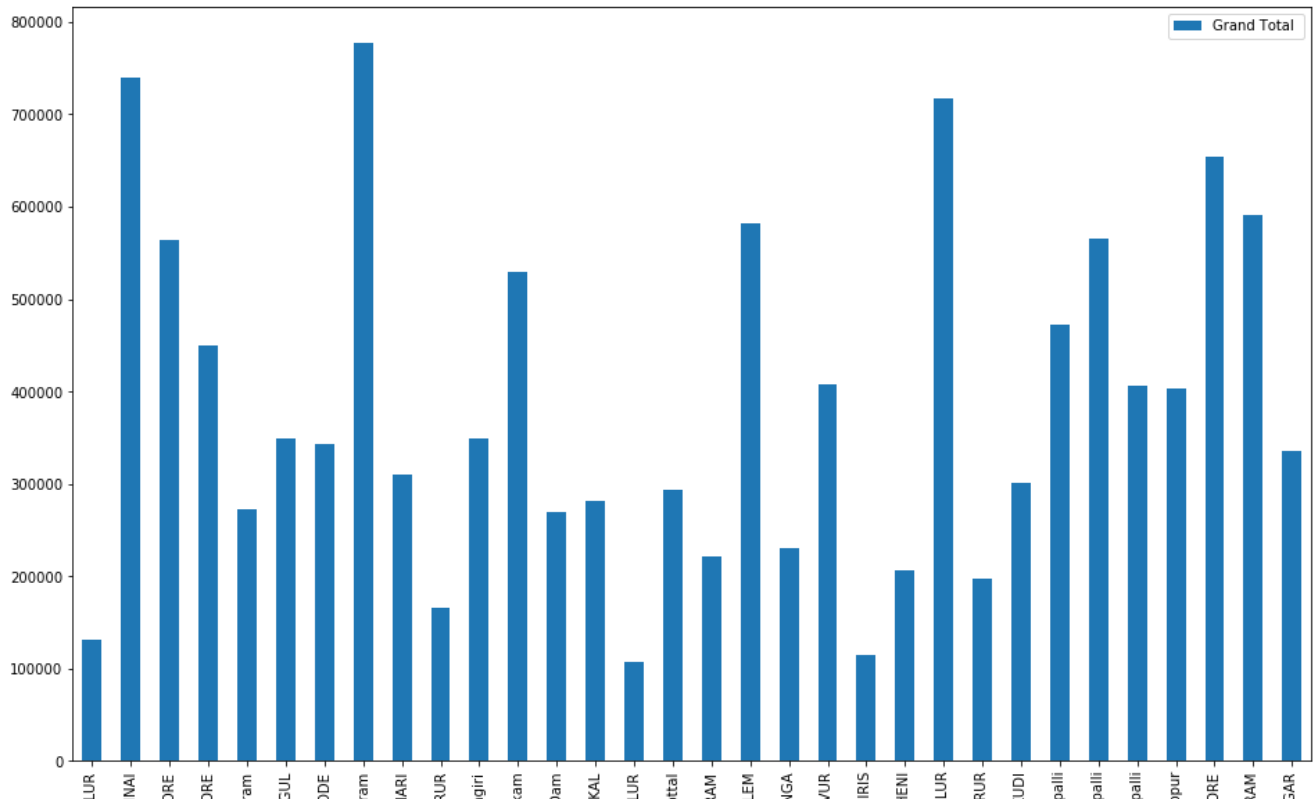
```
23]:
```

	Location	Latitude	Longitude
0	Adirampattinam	10.21	79.25
1	Ambasamudram	8.43	77.29
2	Ambur	21.50	78.45
3	Anaimalai Hills	10.24	76.40
4	Arakkonam	13.05	79.43

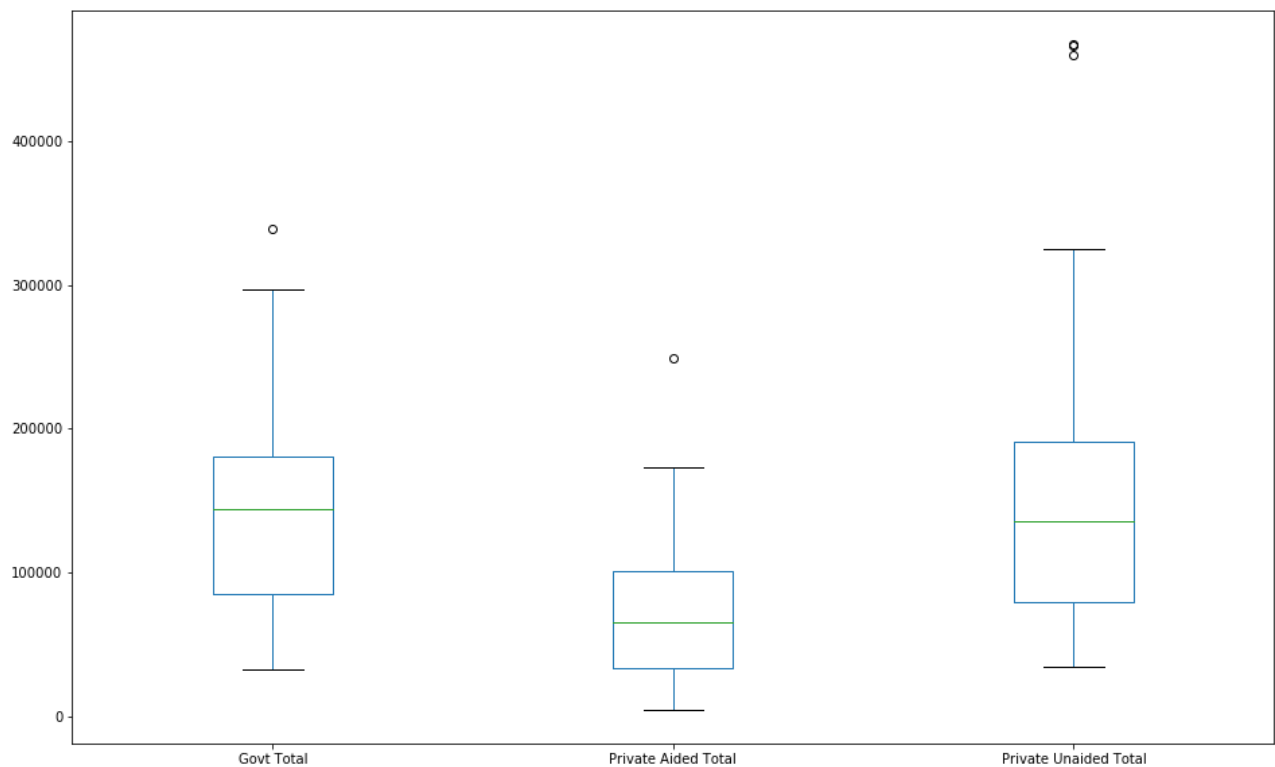
Methodology

- Bar chart was drafted to visualise the variance of data district wise
- The Histogram shows that there are a few Districts which are on the higher side of number of Enrolment count and a few on the lower side

[152]: <matplotlib.axes._subplots.AxesSubplot at 0x7f7564881198>

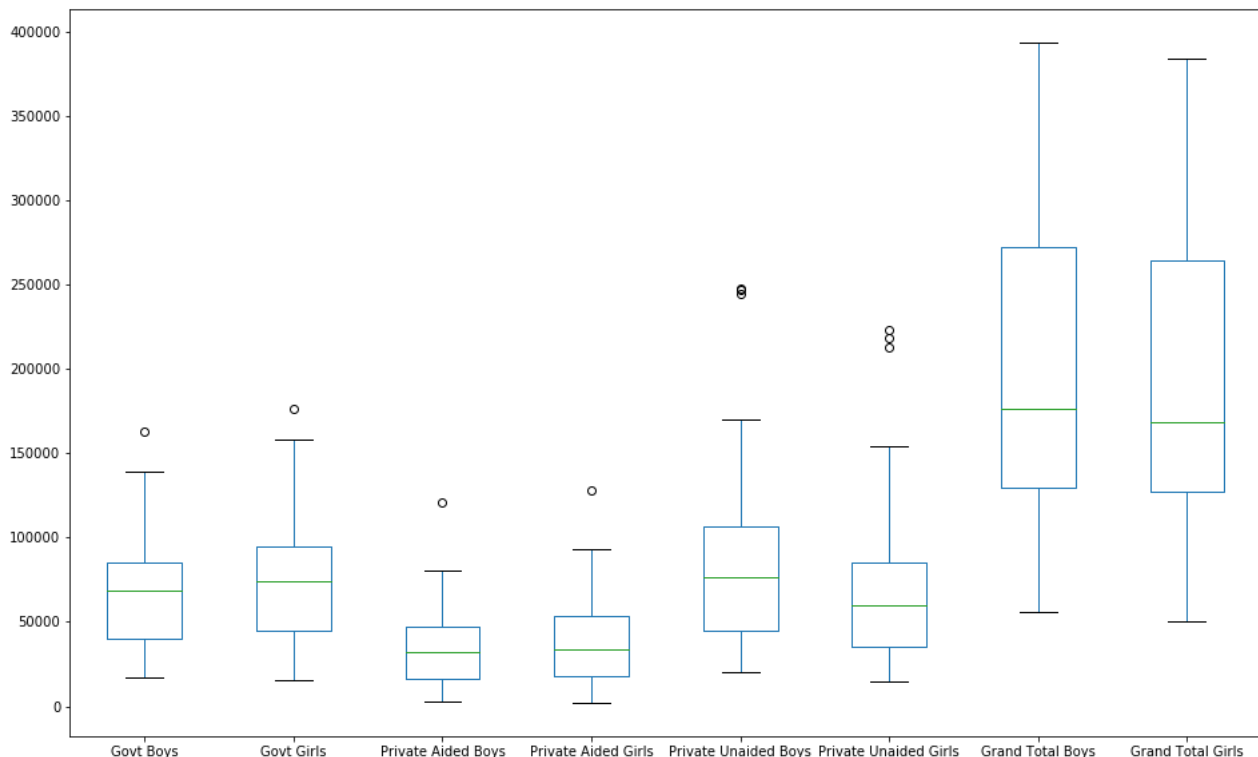


[161]: <matplotlib.axes._subplots.AxesSubplot at 0x7f75624f6ac8>



- The Box Plot of Gender wise Enrolment in different Management Type of Schools show a very interesting pattern that coincides with the idea of India mentality of Girl-Child

[162]: <matplotlib.axes._subplots.AxesSubplot at 0x7f756247f0b8>



education

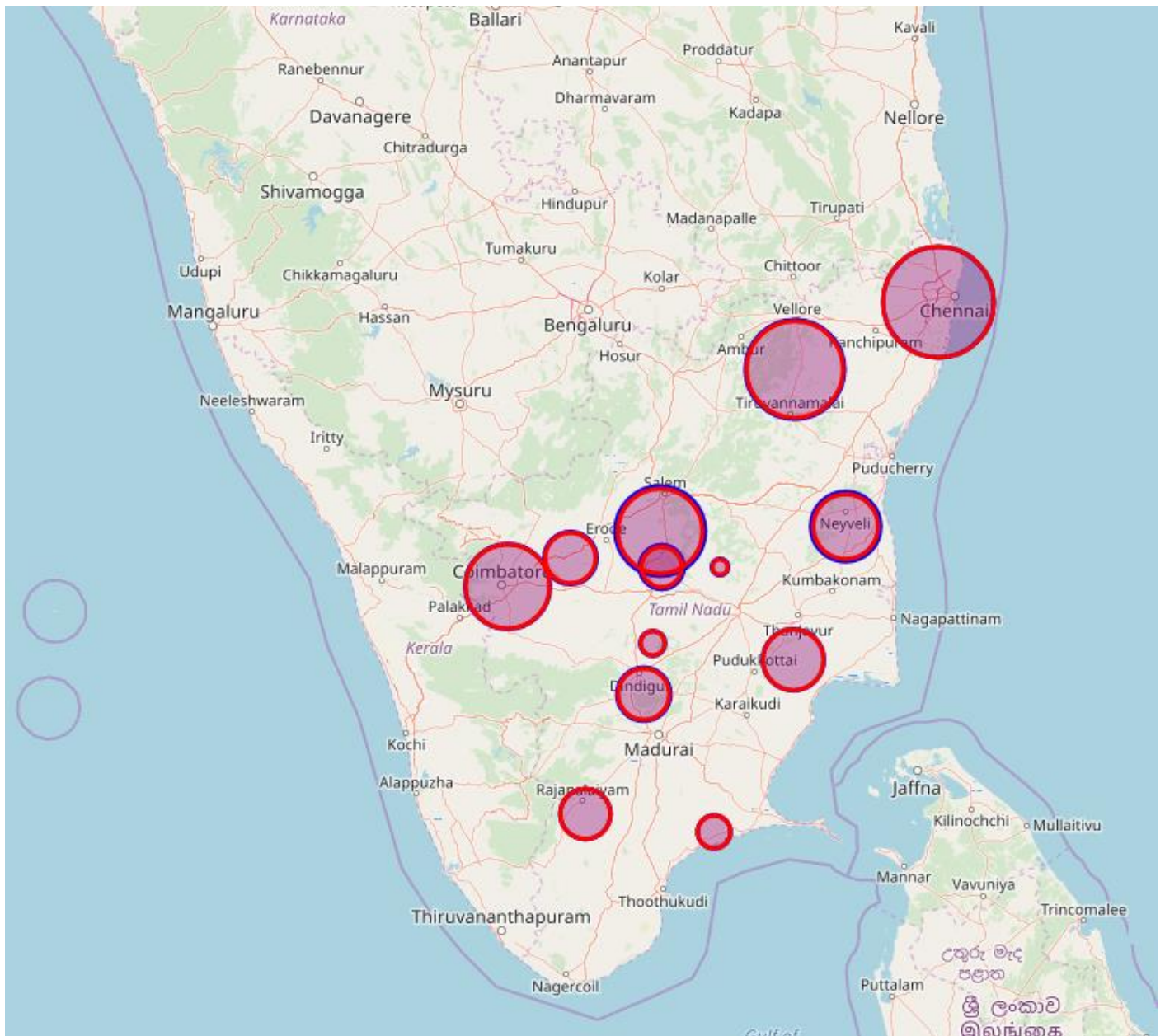
- The Enrolment count is to be visualised on the State map of Tamilnadu in a District-wise manner

Results

- The Map shows that North East part which includes the Capital of Tamilnadu, Chennai which is also a Metropolitan Port city has the highest number of Enrolment
- Chennai is followed by Vellore which is a neighbouring District
- The Eastern Parts of Tamilnadu represented by Coimbatore and Salem also have a fairly high Enrolment among all the Districts
- The western and Southern parts show a very low number of Enrolment compared to the others

Discussion

- The government might have to focus more on the Eastern and Southern Parts to improve Quantity of Educated Population



- Moreover the insight on girl Children being preferably enrolled in Aided Schools and otherwise for boy Children leads to another picture which might be useful for social Activists to work for changing the Society's Misconceptions

Conclusion

- The Education in Tamilnadu, India seems to be dominated by a few cities like Chennai, Coimbatore, Vellore and Kanchipuram
- It needs to be well spread out though the State to be accessible to everyone in a fair manner