GDP Analysis of India

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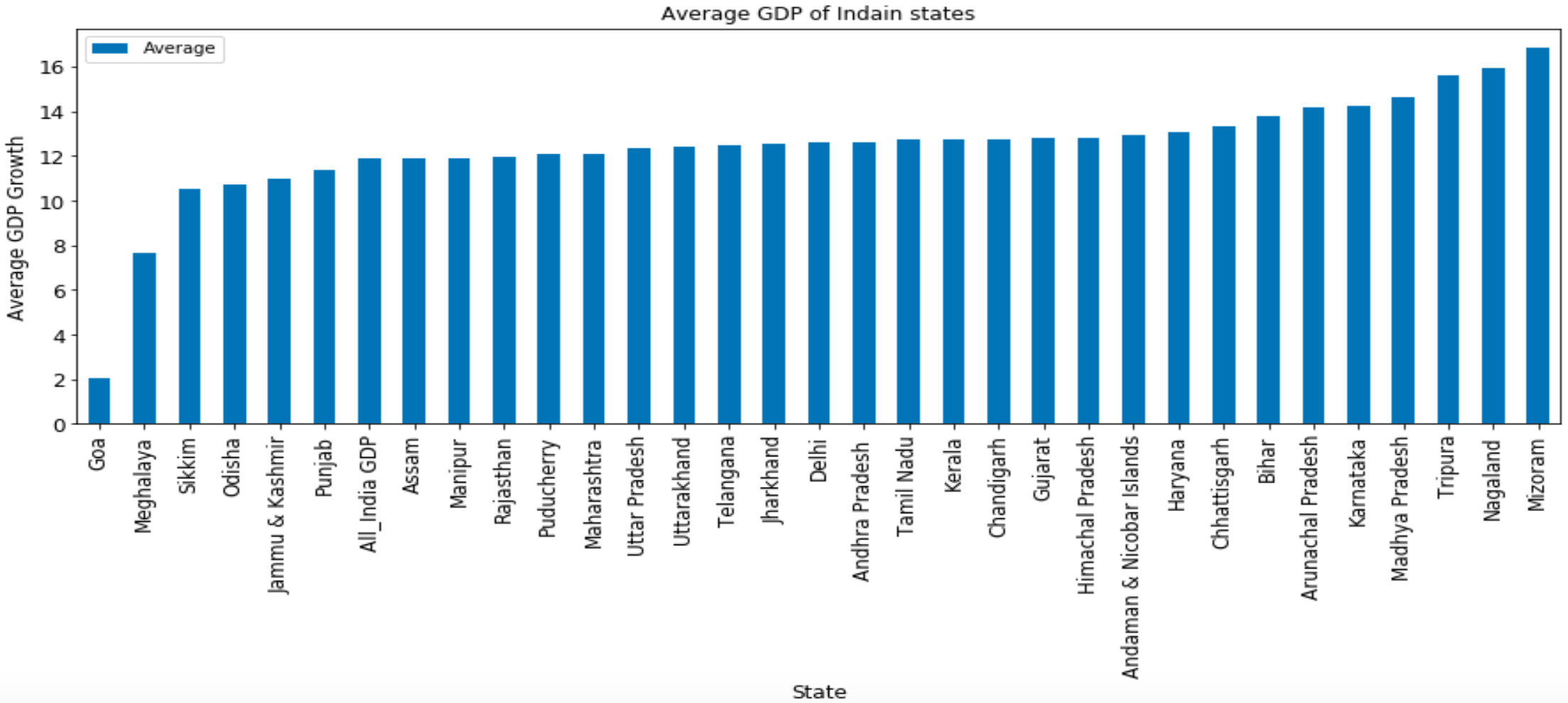
GDP Analysis of Indian States

- Below is bar plot for growth rate of GDP of Indian states over the years. That shows which state is growing fast and which state is growing very slowly.



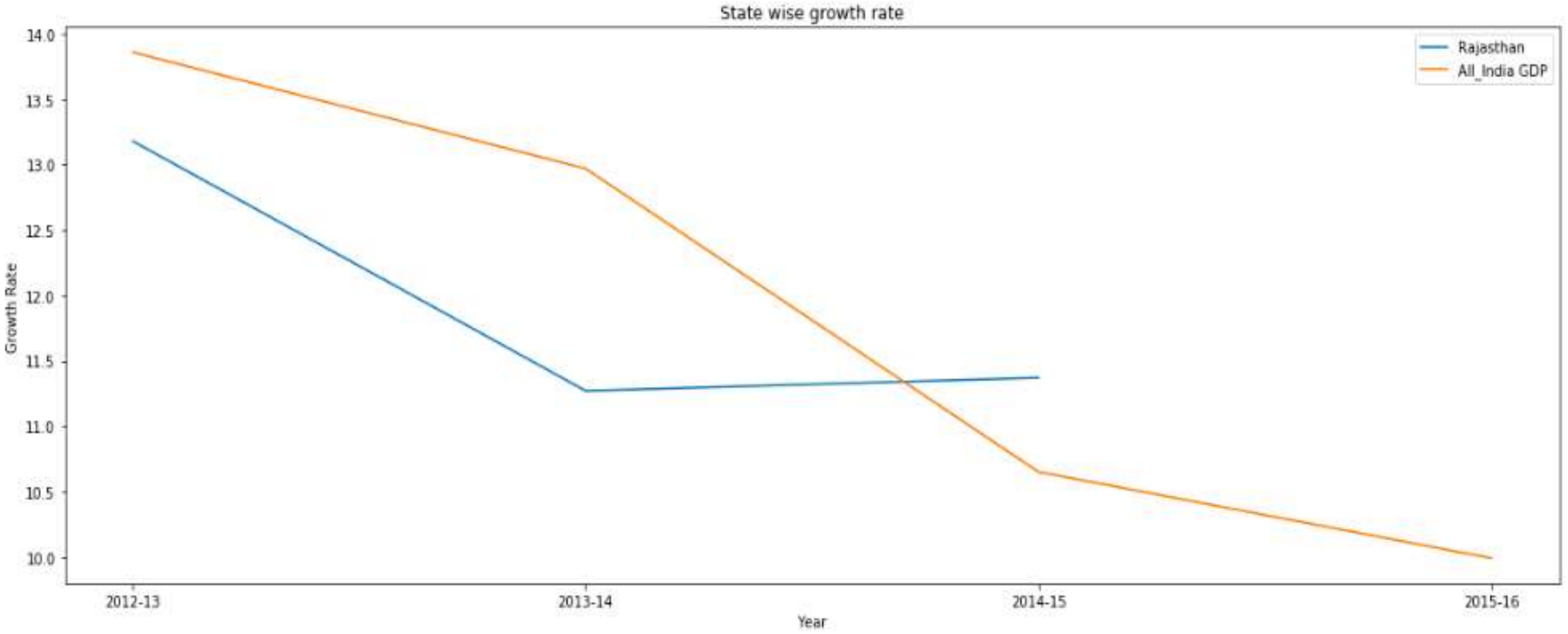
GDP Analysis of Indian States

From the above chart we can clearly see that –

- Mizoram, Nagaland, Tripura, Madhya Pradesh and Karnataka are constantly growing fast over the years in compare to other states.
- Goa, Meghalaya, Sikkim, Odisha and J&K are constantly growing slow over the years in compare to other states.
- Most of the states are growing consistently at the rate of 11% approximately, which is very close to All India GDP which is very good insight for most of the states.

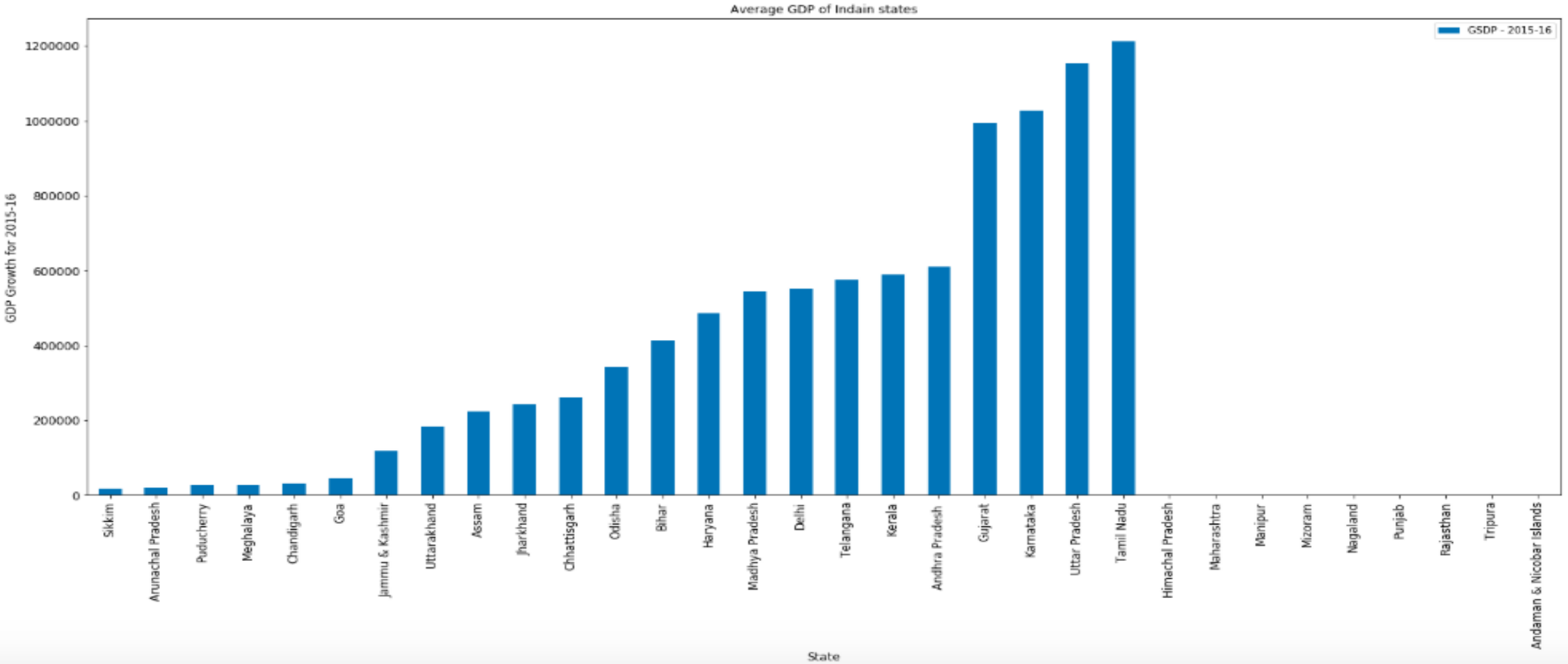
GDP growth between Rajasthan and India

- When comparing GDP growth rate of Rajasthan to All India GDP, then it clearly shows during the year 2012-13 and 2013-14 Rajasthan was growing slowly and during year 2014-15 it has grown faster in compare to Indian GDP growth rate.



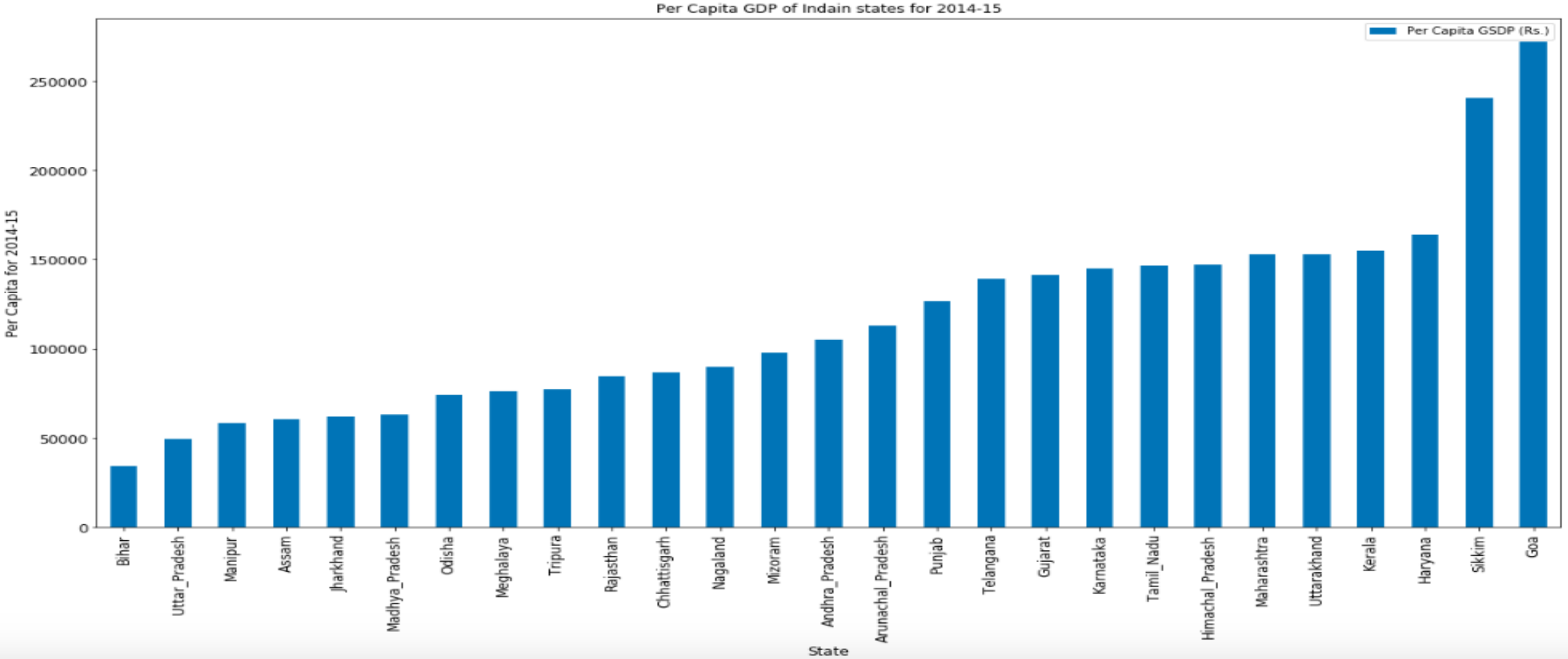
GDP of the states for the year 2015-16

- Below is the bar plot for GDP of the states for the year 2015-16, From the plot we can clearly see the first five bars has the lowest GDP and the last five bars has the highest GDP and for some states data is not available so there are no bars plotted.



GDP per capita for all the states

- Below is the bar plot for 'Per Capita income' of Indian states for the year of 2014-15, that shows the states which has highest and lowest per capita income.
- And Ratio of highest to lowest per capita GDP : 8.005



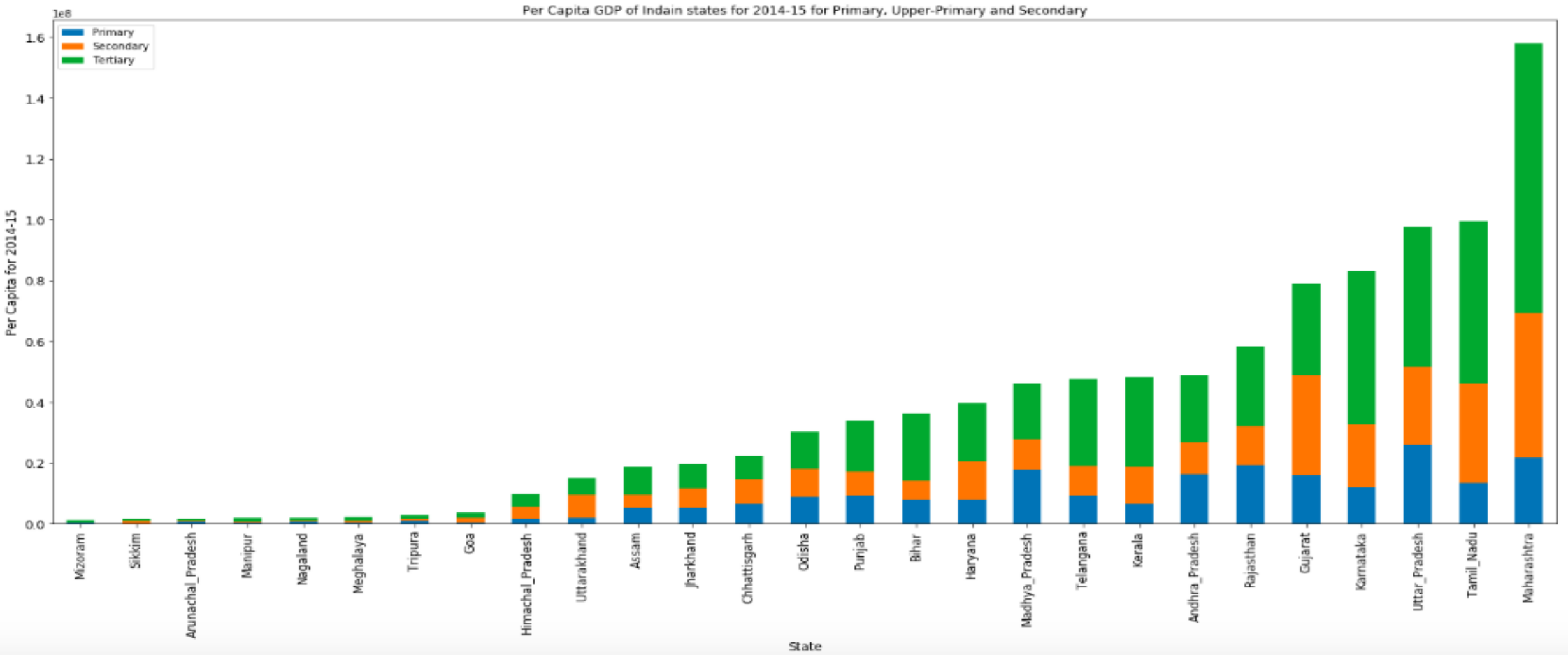
GDP per capita for all the states

From the above chart we can clearly see that –

- Goa's per capita income is very high in compared to other states, but from the Average growth rate chart we can see that Goa's average growth rate is very slow with respect to other state. So there might be case that goa's population is low in compare to other state.
- So we can take one insight from above two chart, if state population is low then there are high chances to increase per capita income.
- By this insight we can recommend to the government that 'Population Control Laws' should be implemented in order to increase per capita income.

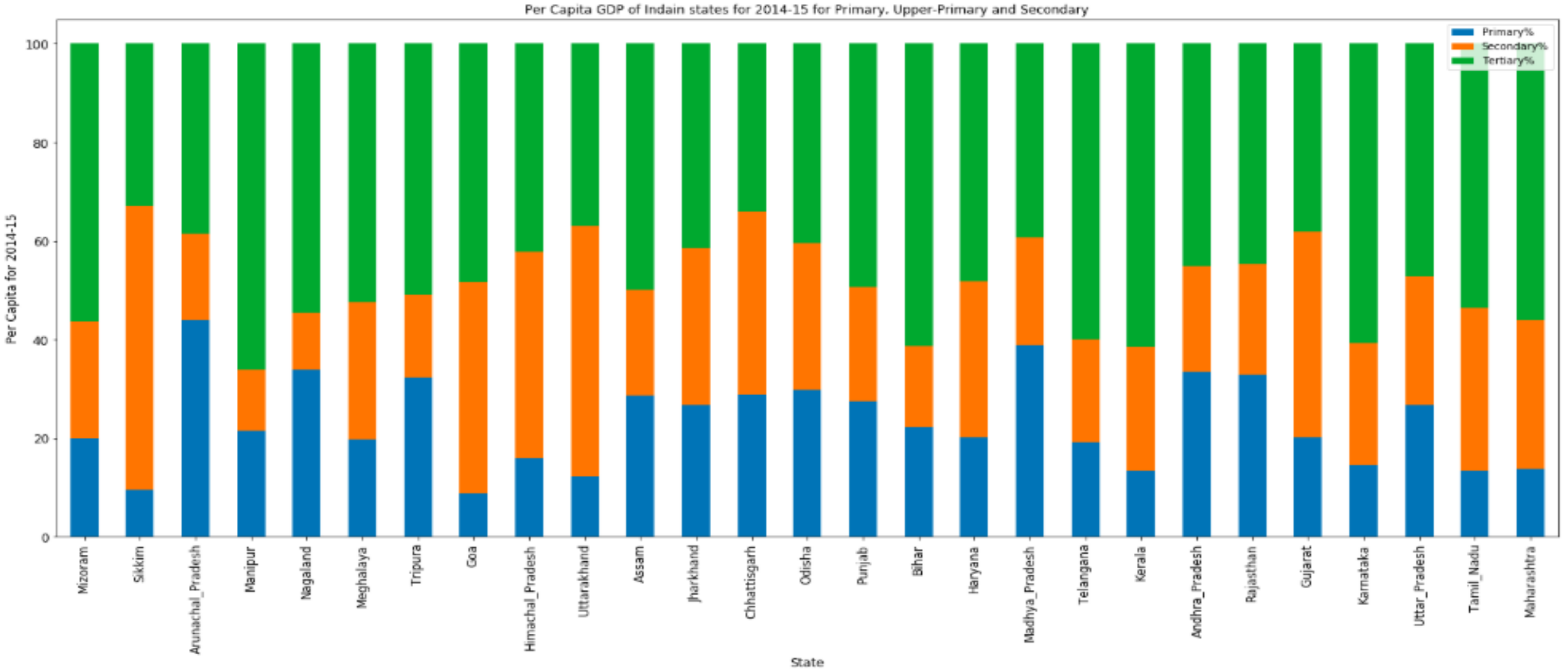
Primary, Secondary and Tertiary sectors

- Below is the stacked bar plot for the Primary, Secondary and Tertiary sectors contribution for the Total GDP for the Indian states.



Primary, Secondary and Tertiary sectors

- Below is the stacked bar plot for the Primary%, Secondary% and Tertiary% sectors contribution for the Total GDP% for the Indian states.



Primary, Secondary and Tertiary sectors

From the Above stacked bar plot for the Primary, Secondary and Tertiary sectors contribution for the Total GDP for the Indian states we can clearly see that -

- Tertiary Sectors shares the almost 50% of GDP for most of the states then Secondary and then primary.
- So from this insight government should invest more into tertiary sectors and should analyse primary sectors for their better improvement, so the total GDP increases more.

Categorised the states

- Based on GDP per capita I have divided states into different category(C1,C2,C3,C4). Where category C1's state has the highest and C4's state has the lowest per capita income.

State Name	Per Capita GSDP (Rs.)	Category
Goa	271793	C1
Sikkim	240274	C1
Haryana	164077	C1
Kerala	154778	C1
Uttarakhand	153076	C2
Maharashtra	152853	C2
Himachal_Pradesh	147330	C2
Tamil_Nadu	146503	C2
Karnataka	145141	C2
Gujarat	141263	C2
Telangana	139035	C2
Punjab	126606	C2
Arunachal_Pradesh	112718	C2

State Name	Per Capita GSDP (Rs.)	Category
Andhra_Pradesh	104977	C3
Mizoram	97687	C3
Nagaland	89607	C3
Chhattisgarh	86860	C3
Rajasthan	84837	C3
Tripura	77358	C3
Meghalaya	76228	C3
Odisha	73979	C3
Madhya_Pradesh	62989	C4
Jharkhand	62091	C4
Assam	60621	C4
Manipur	58442	C4
Uttar_Pradesh	49450	C4
Bihar	33954	C4

Top sub-sectors for C1

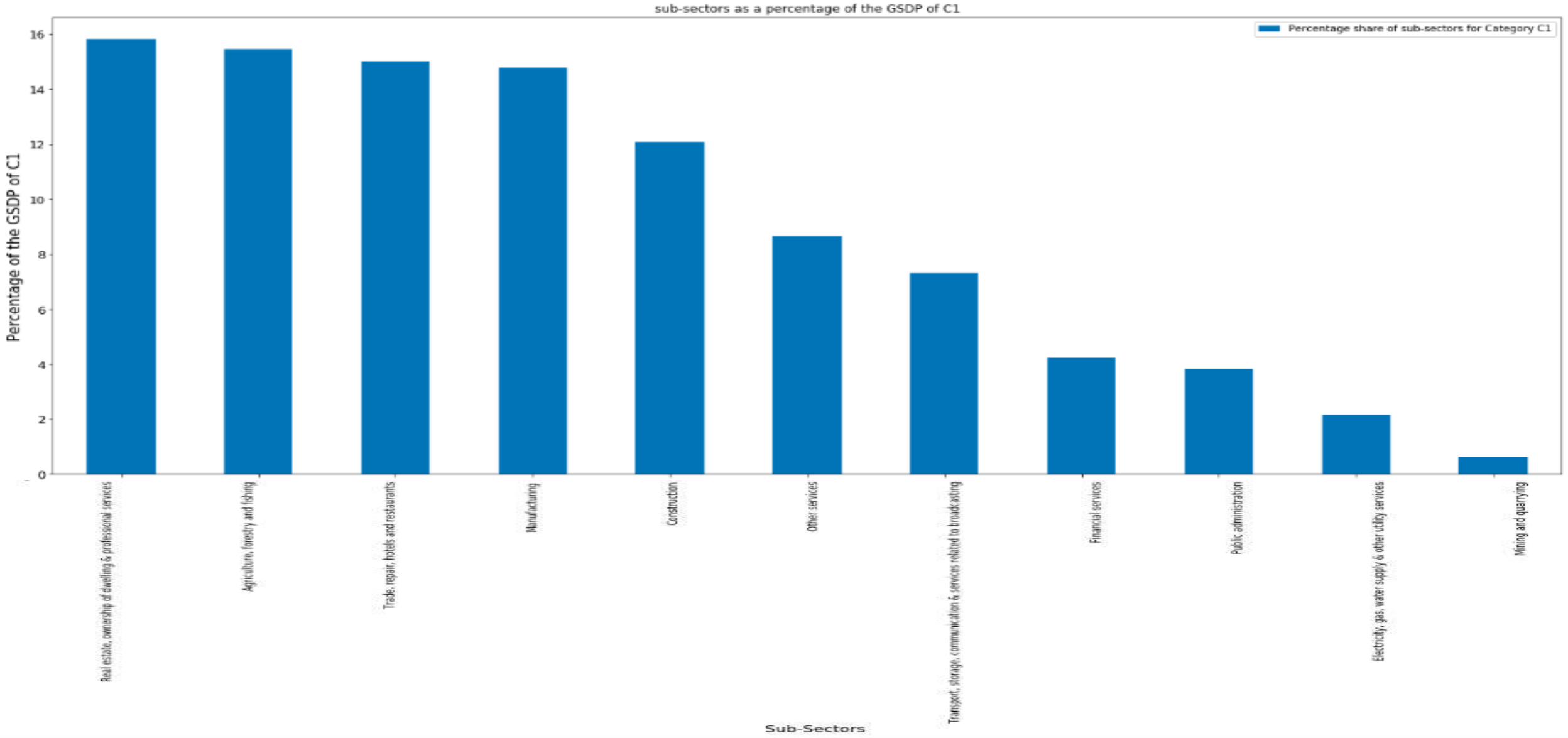
Top sub-sectors that contribute to approximately 80% of the GDP of **C1** category.

1. 'Real estate, ownership of dwelling & professional services'
2. 'Agriculture, forestry and fishing'
3. 'Trade, repair, hotels and restaurants'
4. 'Manufacturing'
5. 'Construction'

So for states who resides under category C1 should focus and invest more on the above sub-category to increase their Total GDP per year.

Top sub-sectors for C1

- Sub-Sectors of the GDP of **C1** category.



Top sub-sectors for C2

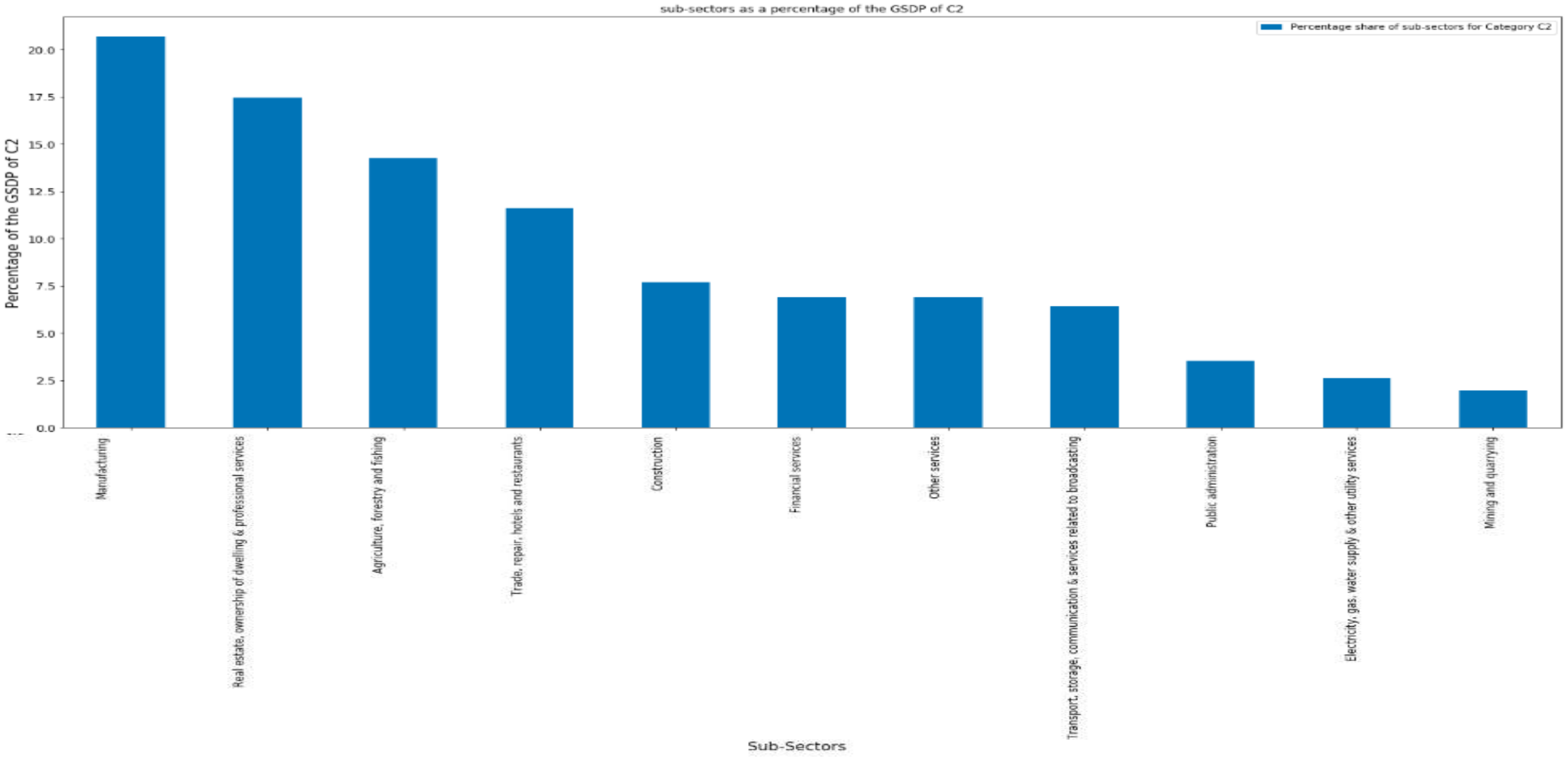
Top sub-sectors that contribute to approximately 80% of the GDP of **C2** category.

1. 'Manufacturing'
2. 'Real estate, ownership of dwelling & professional services'
3. 'Agriculture, forestry and fishing'
4. 'Trade, repair, hotels and restaurants'
5. 'Construction'
6. 'Financial services'

So for states who resides under category C2 should focus and invest more on the above sub-category to increase their Total GDP per year.

Top sub-sectors for C2

- Sub-Sectors of the GDP of **C2** category.



Top sub-sectors for C3

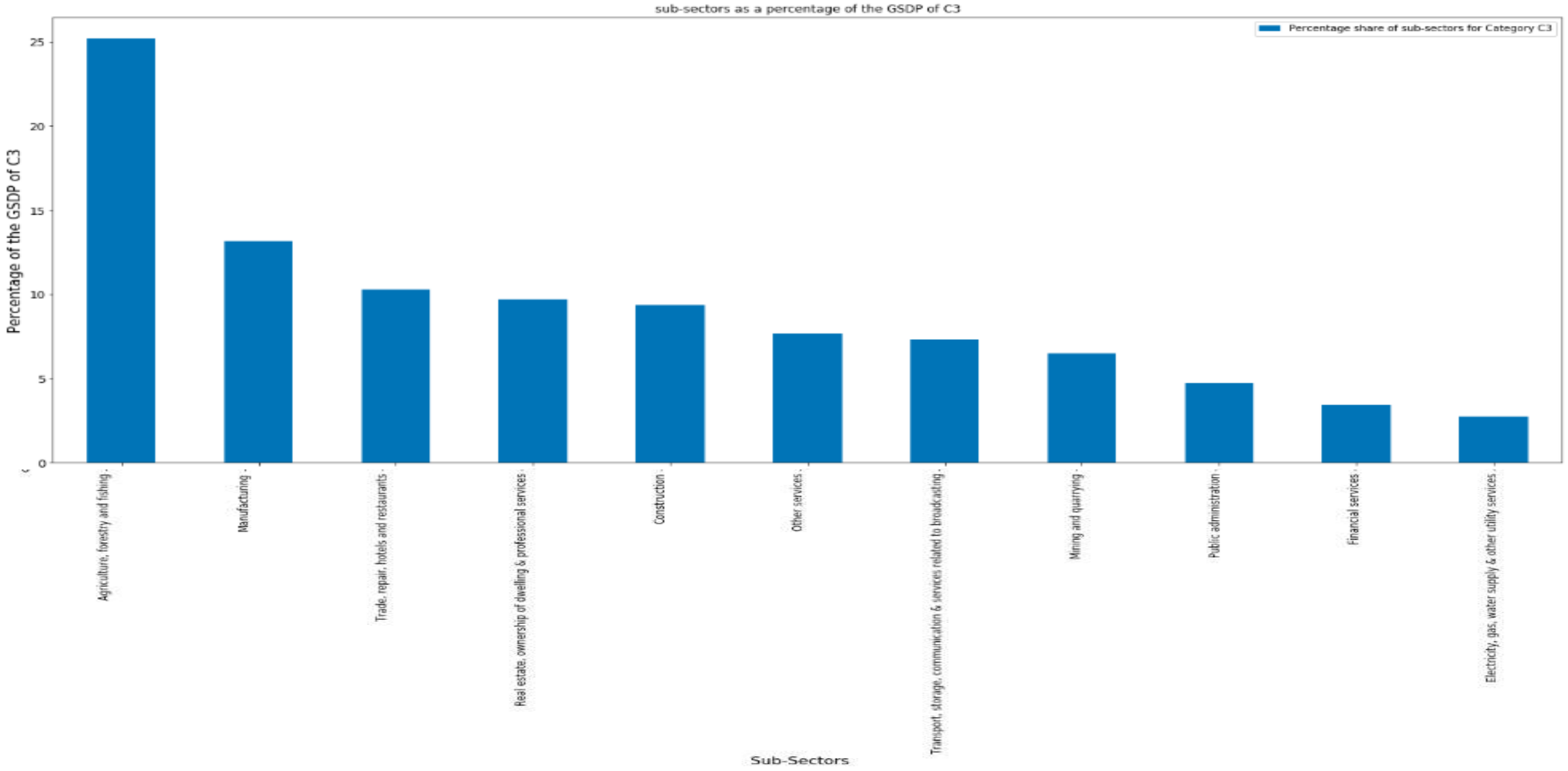
Top sub-sectors that contribute to approximately 80% of the GDP of **C3** category.

1. 'Agriculture, forestry and fishing'
2. 'Manufacturing'
3. 'Trade, repair, hotels and restaurants'
4. 'Real estate, ownership of dwelling & professional services'
5. 'Construction', 'Other services'

So for states who resides under category C3 should focus and invest more on the above sub-category to increase their Total GDP per year.

Top sub-sectors for C3

- Sub-Sectors of the GDP of **C3** category.



Top sub-sectors for C4

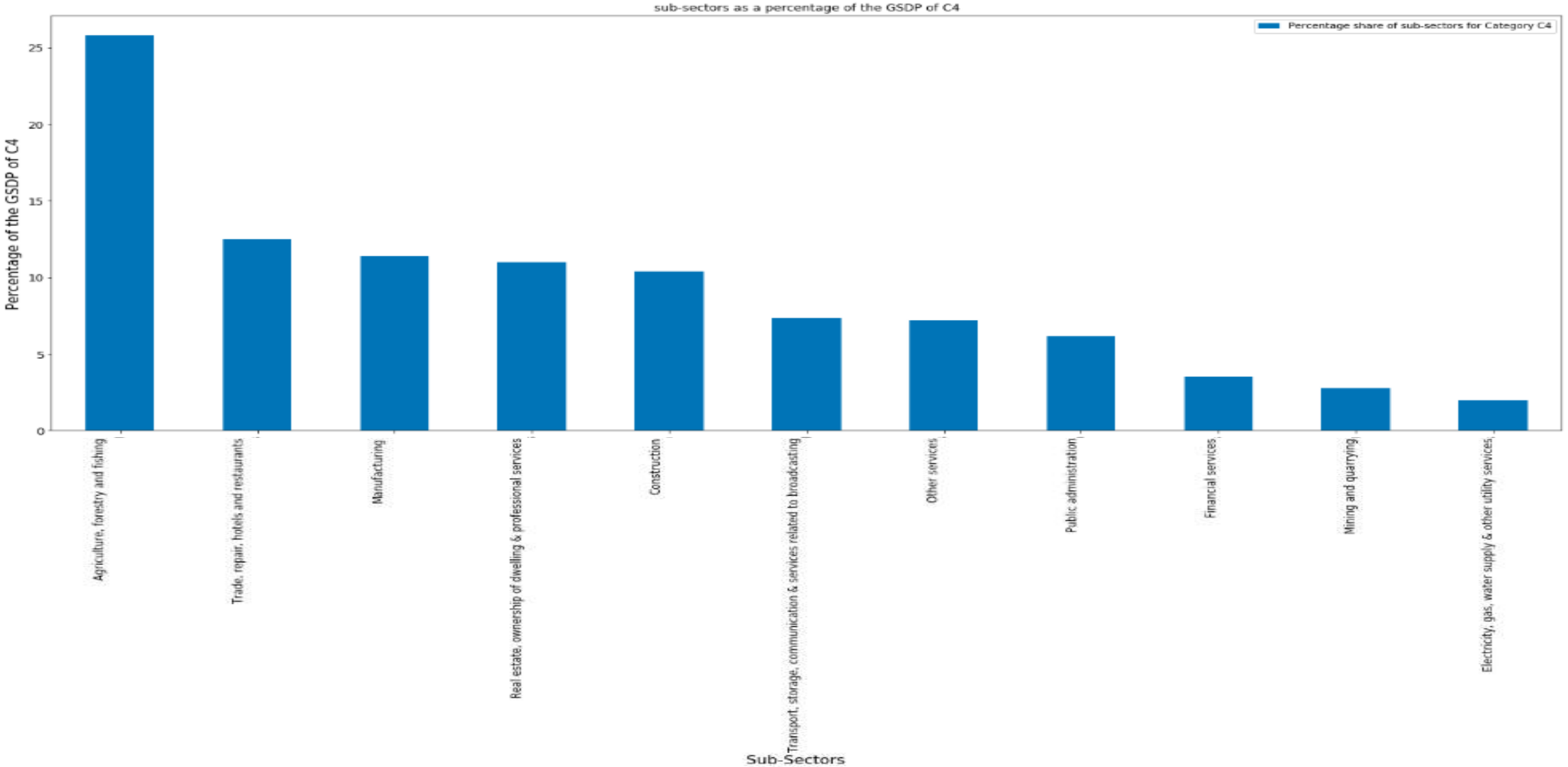
Top sub-sectors that contribute to approximately 80% of the GDP of **C4** category.

1. 'Agriculture, forestry and fishing'
2. 'Trade, repair, hotels and restaurants'
3. 'Manufacturing'
4. 'Real estate, ownership of dwelling & professional services'
5. 'Construction', 'Transport, storage, communication & services related to broadcasting'

So for states who resides under category C4 should focus and invest more on the above sub-category to increase their Total GDP per year.

Top sub-sectors for C4

- Sub-Sectors of the GDP of **C4** category.



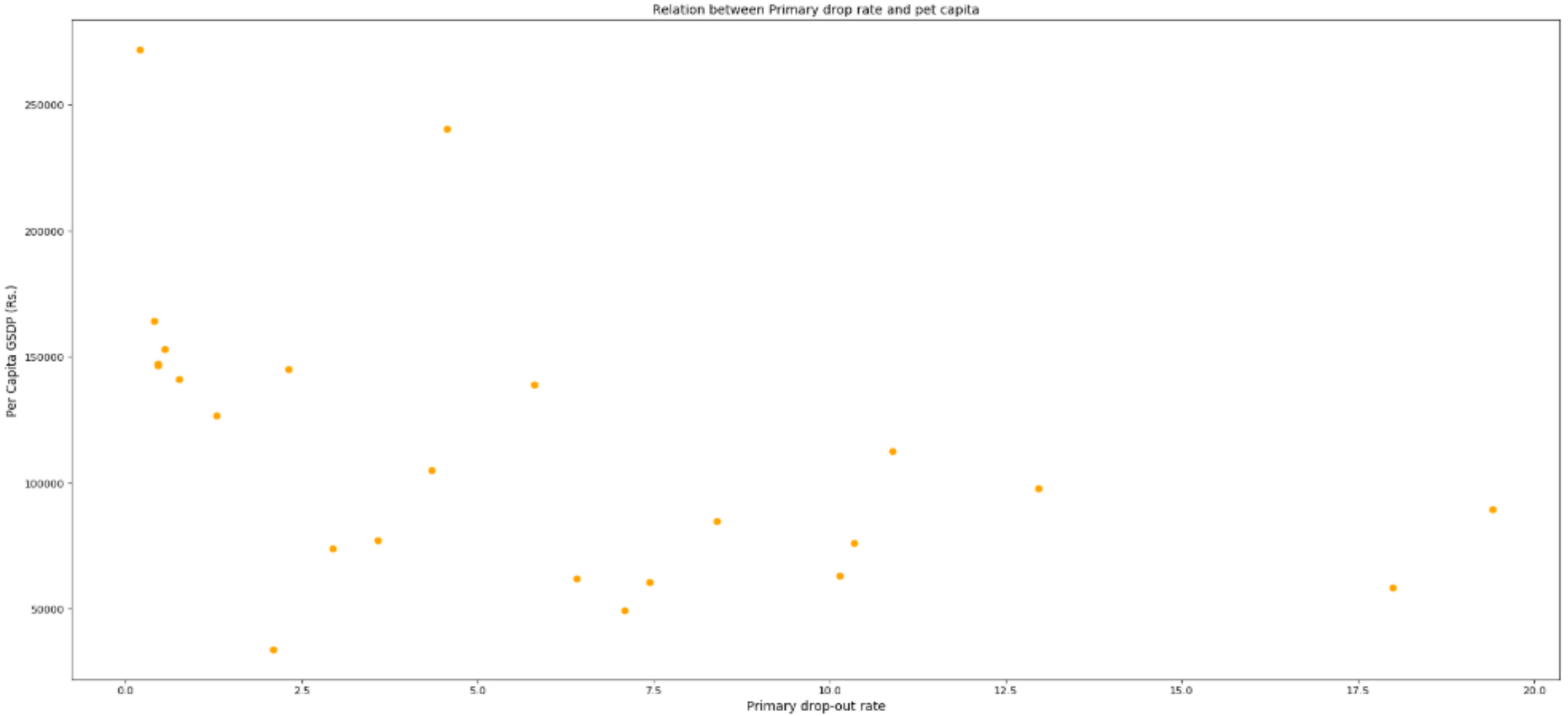
Categorised the states

When states has been categorized into different section depending upon their Total GDP. We can take the few insights –

- States which are investing more on Real estate, manufacturing and moderately investing into agriculture are having more per capita income in compare to other state.
- States with lowest per capita income are getting higher GDP with Agriculture mostly.
- So by looking it other-wise we can see that states which are getting higher percentage GDP from Agriculture are having low per capita income.
- One insights can be that people related to agriculture are not being paid much in compare to people related to Real estate and Manufacturing.
- So government should increase income for the people who are related to agriculture in order to increase per capita income.

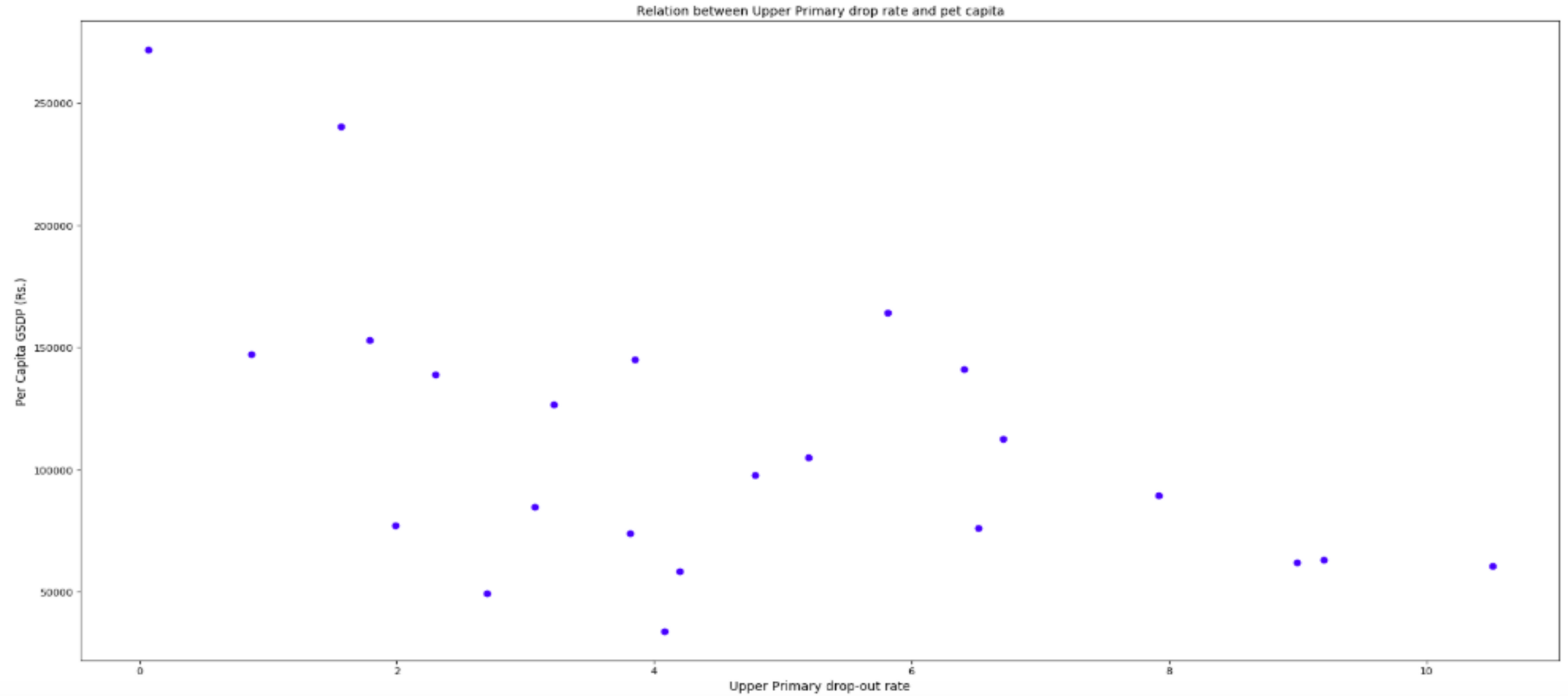
Correlation of GDP per capita with dropout rates in Primary education

Below Scatter plot shows the correlation between Primary drop-out in education to GDP per capita shows that if state has low dropout rate then it has high per-capita income.



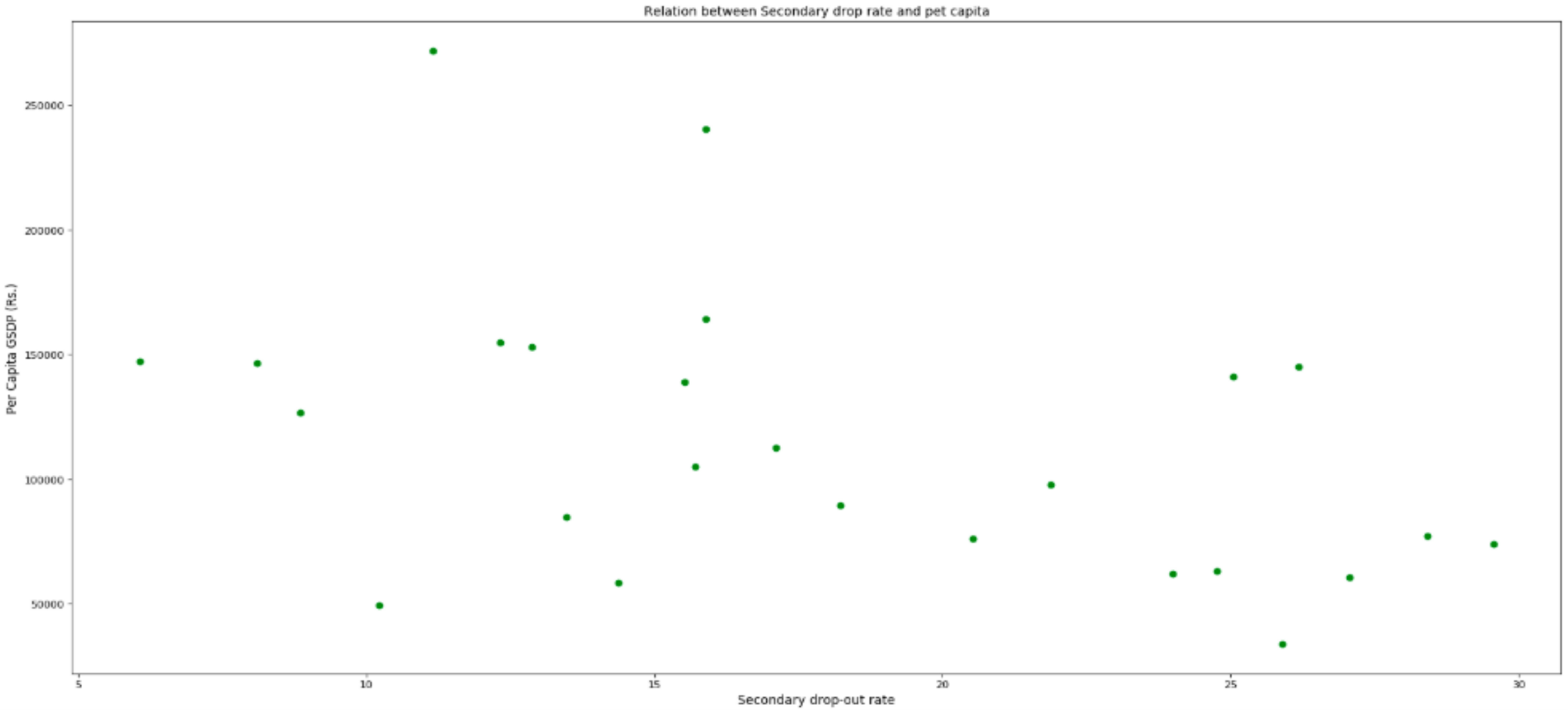
Correlation of GDP per capita with dropout rates in education

Below Scatter plot shows the correlation between Upper-Primary drop-out in education to GDP per capita shows that if state has slightly high dropout rate then it has moderate per-capita income.



Correlation of GDP per capita with dropout rates in education

Below Scatter plot shows the correlation between Upper-Primary drop-out in education to GDP per capita shows that if state has high dropout rate then it has moderate per-capita income and



THANK - YOU