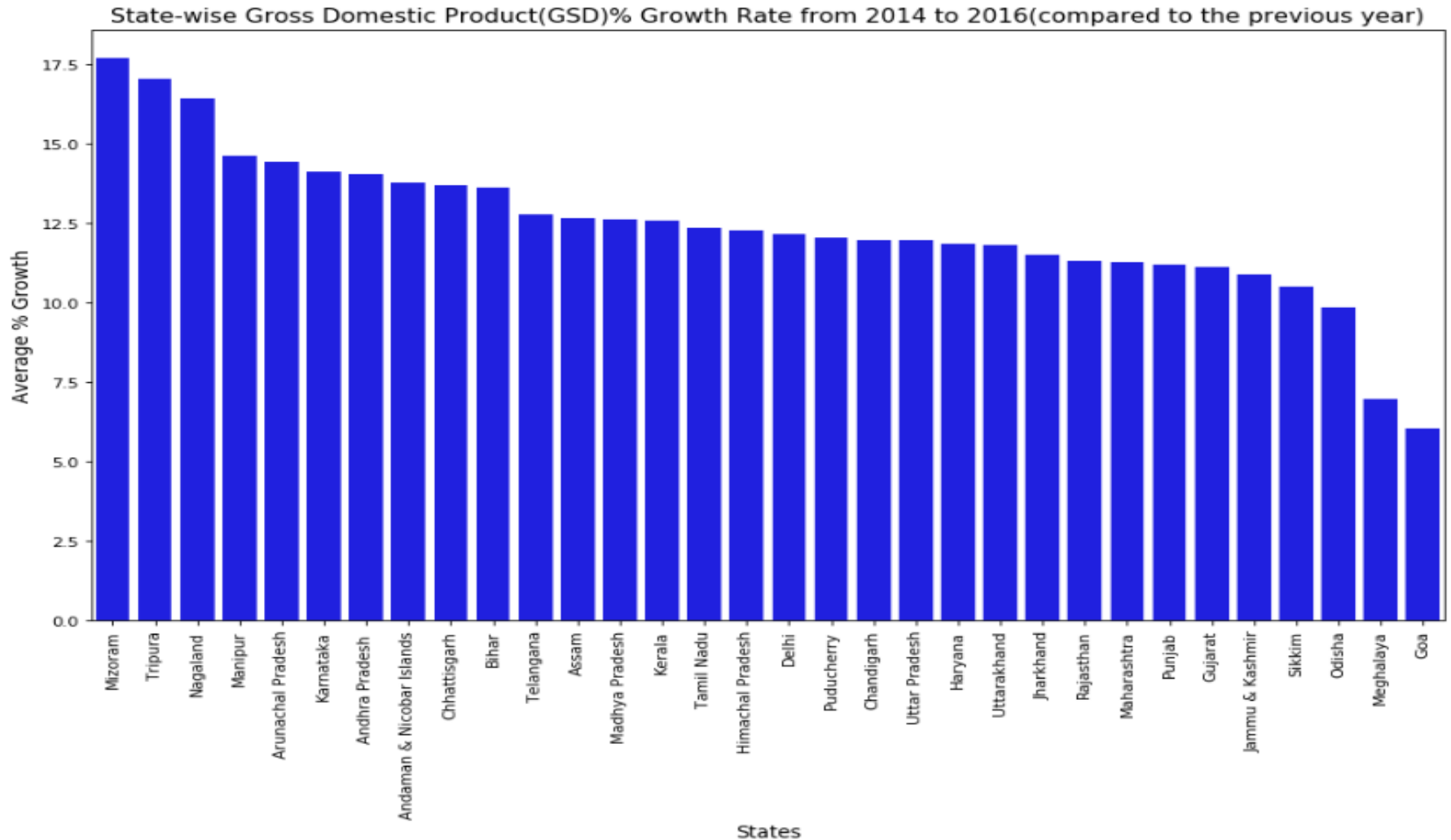


# **GSDP Analysis** **of the** **Indian States**

## Key Points:

- 1) State-wise % Growth Rate in Gross Domestic Product(GSDP) from 2014 to 2016
- 2) State-wise GDP for year 2015-2016
- 3) Variation in Per capita GDP for the states.
- 4) How Primary,secondary and tertiary sectors performing towards total GSDP (Year 2014-2015)
- 5) Correlation in Education drop out rate against GDP Per capita
- 6)Highlights and Recomondations

# State-wise Gross Domestic Product(GSD) Growth Rate from 2014 to 2016(compared to the previous year) :



## Notes for graph

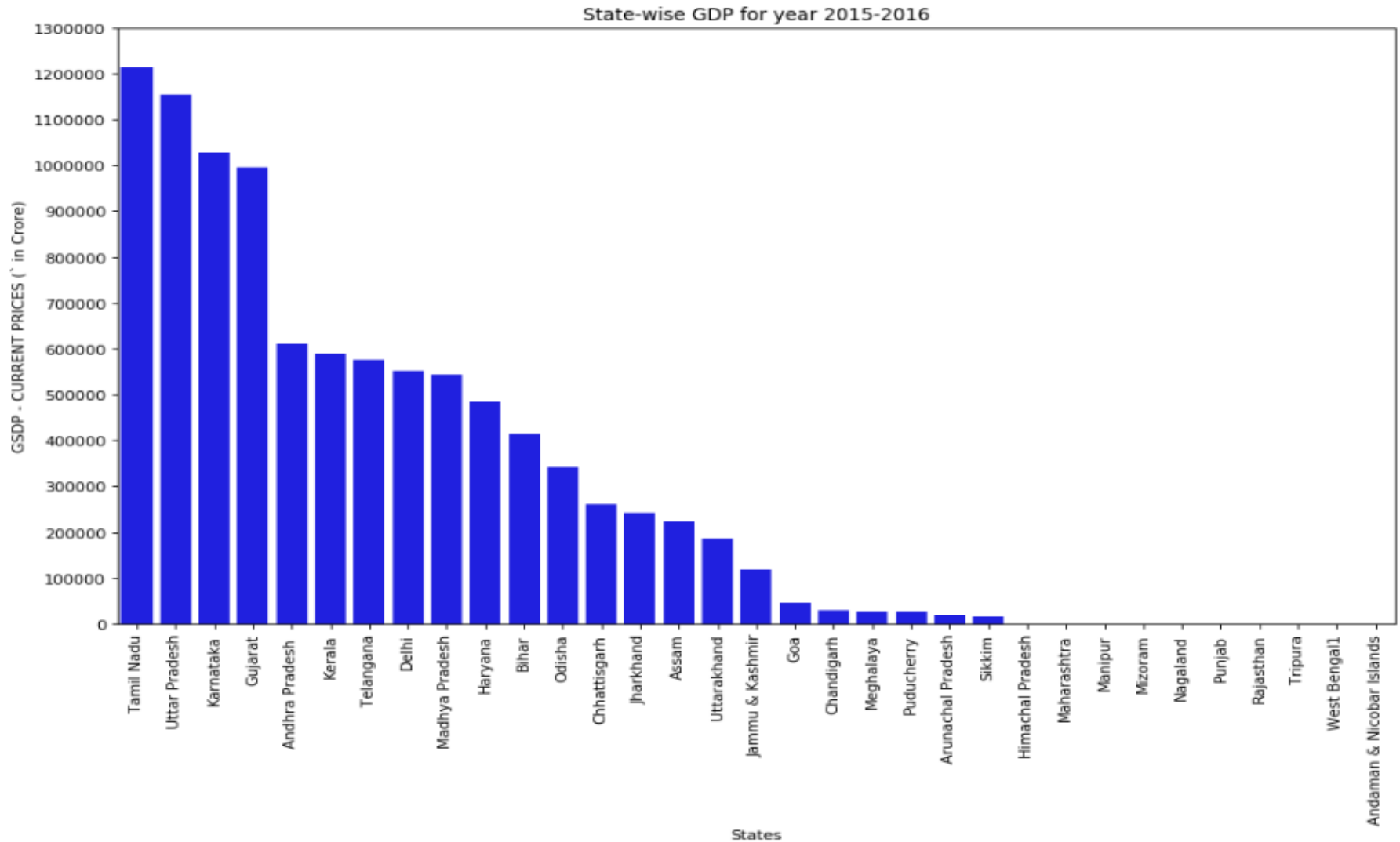
### 'State-wise Gross Domestic Product(GSD) % Growth Rate from 2014 to 2016 (compared to the previous year)' :

- 1) Percentage growth for the year 2015-2016 data was unavailable for Mizoram, Tripura, Nagaland, Manipur, Andaman & Nicobar Islands, Himachal Pradesh, Rajasthan, Maharashtra, Punjab.
- 2) For West Bengal for all years data was unavailable, hence not considered.
- 3) Imputing data marked as NA may lead to misleading results hence kept as it is.

### Key points from the graph :

- 1) If we consider states with all the years data available, Arunachal Pradesh (14.42), Karnataka (14.12) and Andhra Pradesh (14.03) are with highest average growth rate, however, Andhra Pradesh is consistently performing over the years with % growth rate from 2014 to 2016 are 12.85, 13.40, 15.85 respectively
- 2) On the other side Odisha, Meghalaya and Goa are the states with lowest Average growth rate, among them Odisha consistently struggling to grow over the years. % growth rate for Odisha from 2014 to 2016 are 12.95, 10.37, 6.19 respectively

# Total GDP of the states for the year 2015-16



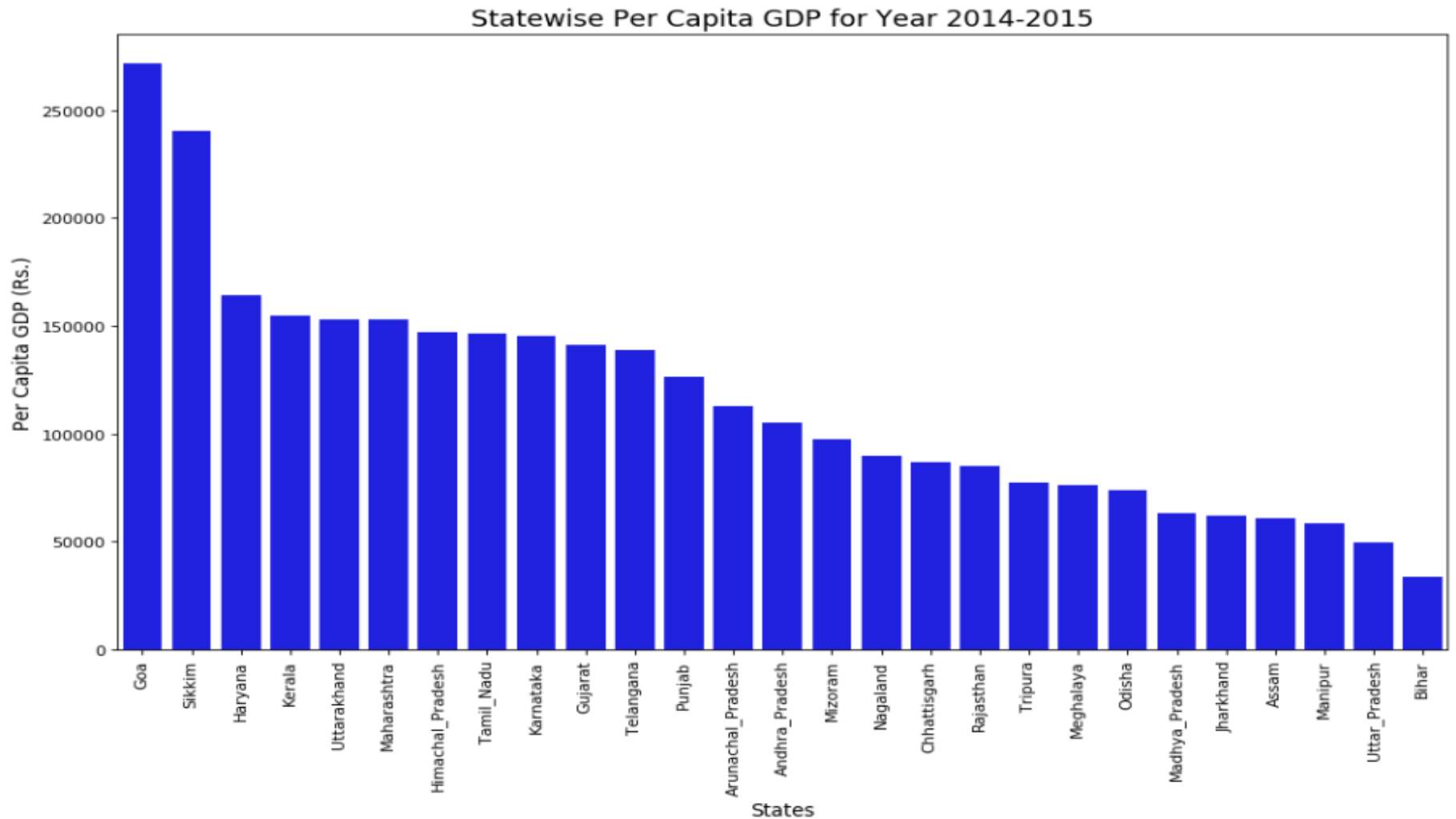
### **Notes for the graph 'State-wise GDP for year 2015-2016':**

- 1) Values for few states and UT were unavailable (marked as NA) in data has not been imputed.  
Can be seen no bar against it in plot.
- 2) GSDP values are measured in crores.

### **Key points from the graph :**

- 1) Top five states with highest GSDP for the year 2015-2016 are Tamil Nadu(1212668.0),Uttar Pradesh(1153795.0),Karnataka(1027068.0),Gujarat(994316.0),Andhra Pradesh(609934.0).
- 2) Bottom 5 states with GSDP are Chandigarh(30304.0),Meghalaya(26745.0), Puducherry (26533.0),Arunachal Pradesh(18784.0),Sikkim(16637.0).
- 3) States from West and South are contributing more towards total GDP as compared to North and East states.

# State-wise Per Capita GDP (Year 2014-2015)

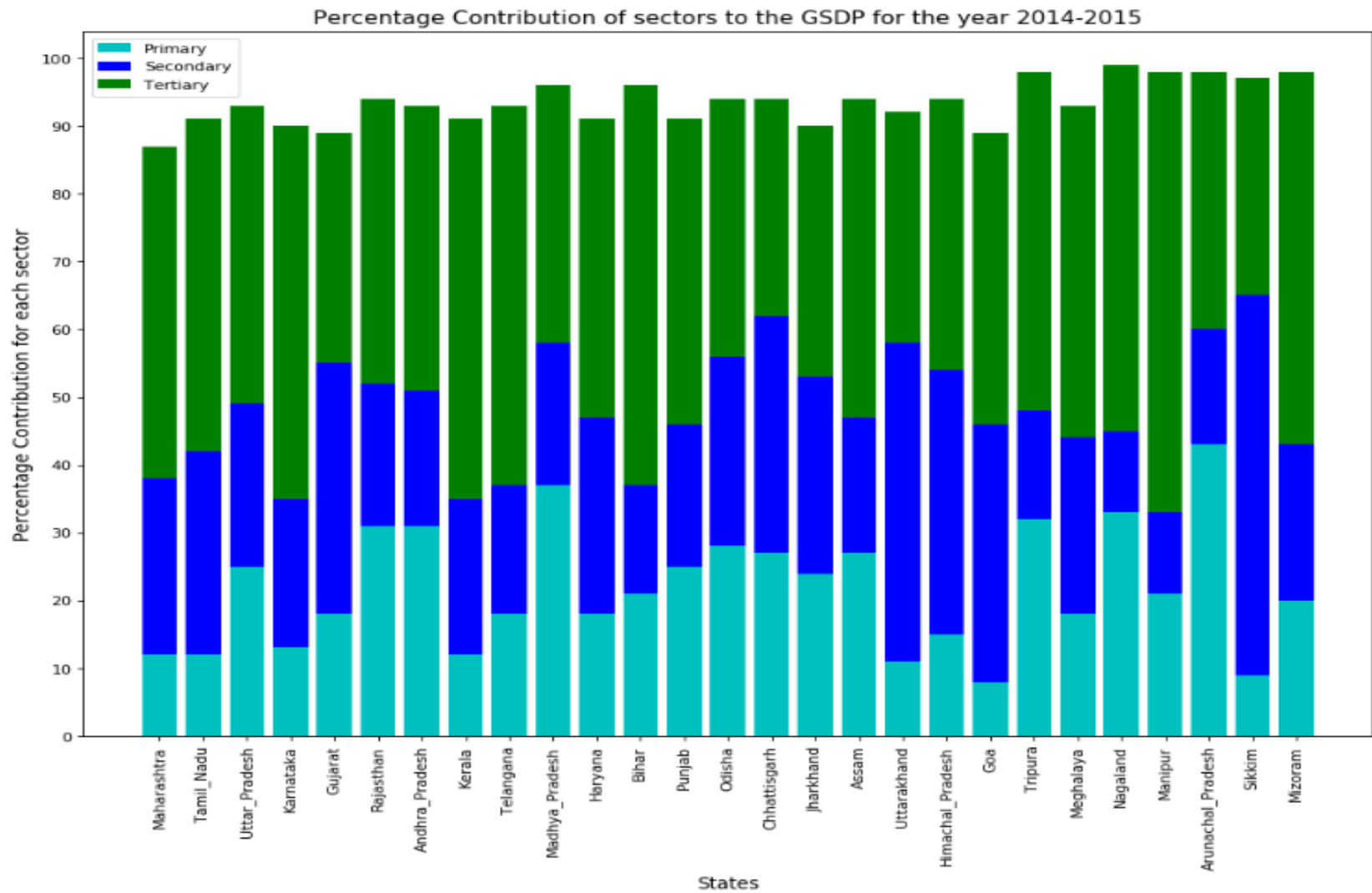


## **Notes for graph Statewise Per Capita GDP for Year 2014-2015 as below :**

1. Top five states with per Capita GDP are Goa(Rs.271793), Sikkim(Rs.240274), Haryana(Rs.164077.0), Kerala(Rs.154778), Uttarakhand(Rs.153076.0).
2. Bottom five states with per Capita GDP are Jharkhand(Rs.62091), Assam(Rs.60621), Manipur(Rs.58442.0), Uttar\_Pradesh(Rs.49450), Bihar(Rs.33954).
3. Ratio of highest per Capita GDP to lowest is 1:0.12 .
4. There is a huge gap between states with highest per capita GDP and lowest per capita GDP. Per Capita GDP for the Bihar is just a 12 % of the Per Capita GDP of Goa.



# Percentage Contribution of sectors to the GSDP(Year 2014-2015)



### **Notes for the graph Percentage Contribution of sectors to the GSDP(Year 2014-2015)' :**

- 1) The nomenclature for this project is as follows: primary, secondary and tertiary are named 'sectors', while agriculture, manufacturing etc. are named 'sub-sectors'.
- 2) % contribution of Primary, Secondary and Tertiary sectors to the Gross State Domestic Product for the states is plotted with highest GSDP to lowest GSDP(left to right).

### **Key highlights :**

- 1) Maharashtra with highest GSDP (179212165cr) has 88.07% contribution from Primary(12.14%),Secondary(26.47%) and Tertiary (49.46%) sectors.
- 2) Mizoram with lowest GSDP (1155933cr) has 98.04% contribution from Primary(19.52%),Secondary(23.36%) and Tertiary(55.16%) sectors.
- 3) Almost for all the states, Tertiary sectors's contributing more towards total GSDP compared to secondary followed by Primary,except Sikkim with contribution Primary(9.12%),Secondary(55.57%) and Tertiary(31.76%)and Arunachal pradesh with Primary(42.77%),Secondary(17.15%) and Tertiary(31.76%) contribution.
- 4) Highest and lowest contribution from Primary sector to the GSDP is from 42.77 % (Arunachal Pradesh), 7.68% (Goa), respectively.
- 5) Highest and lowest contribution from Secondary sector to the GSDP is from 55.57 % (Sikkim), 12.20% (Manipur), respectively.
- 6) Highest and lowest contribution from Tertiary sector to the GSDP is from 65.25 % (Manipur), 31.76% (Sikkim), respectively.

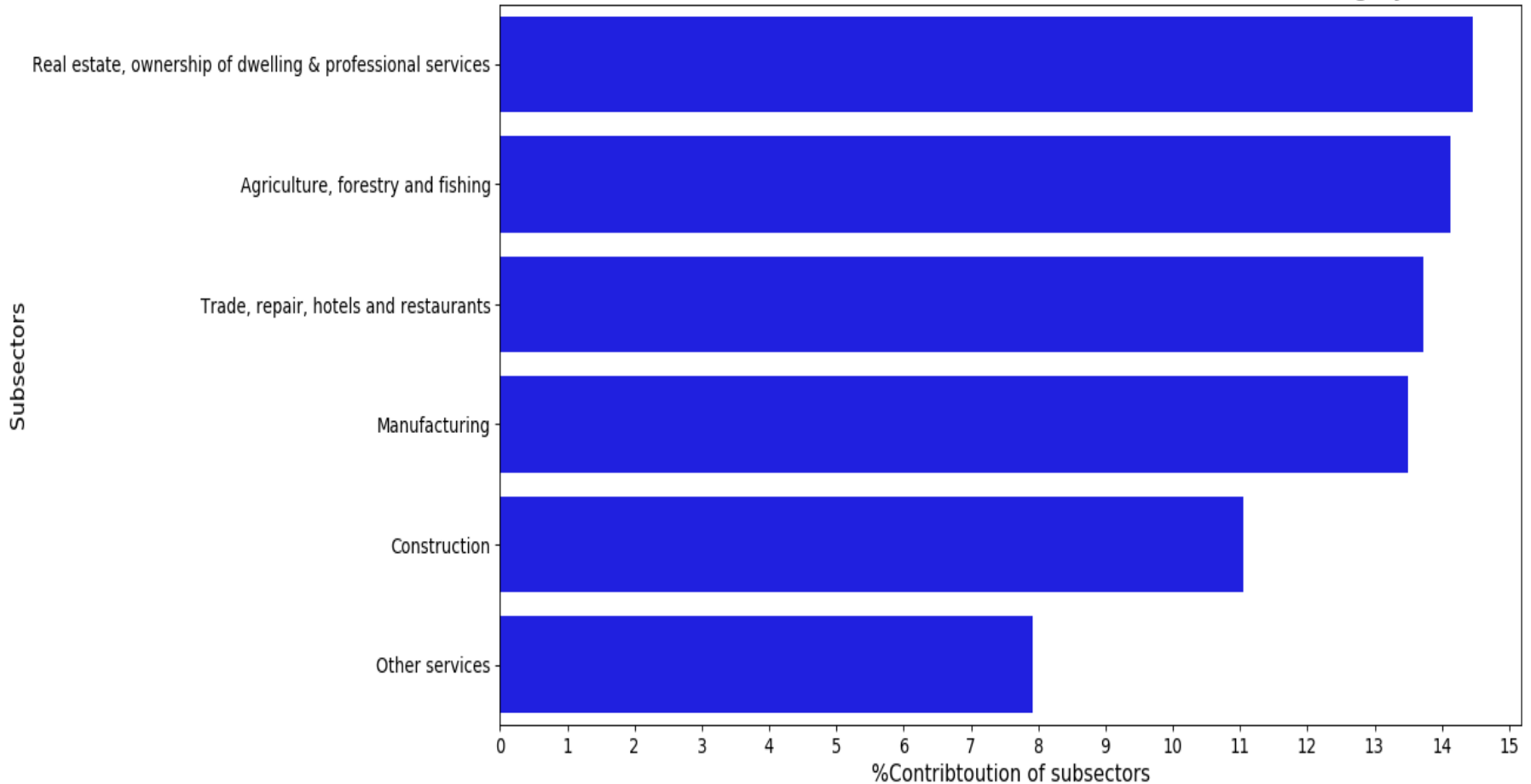
For further analysis, states are categorized into four groups based on the GDP per capita (C1, C2, C3, C4, where C1 would have the highest per capita GDP and C4, the lowest). The quantile values are (0.20, 0.5, 0.85, 1)

1. States belong to category C1 (GDP Per Capita is  $\geq 154778$  Rs.) are Goa, Sikkim, Haryana, Kerala.
2. States belong to category C2 (GDP Per Capita is  $\geq 112718$  Rs.) are Uttarakhand, Maharashtra, Himachal Pradesh, Tamil\_Nadu, Karnataka, Gujarat, Telangana, Punjab, Arunachal\_Pradesh.
3. States belong to category C3 (GDP Per Capita is  $\geq 73979$  Rs.) are Andhra Pradesh, Mizoram, Nagaland, Chhattisgarh, Rajasthan, Tripura, Meghalaya, Odisha.
4. States belong to category C4 (GDP Per Capita is  $\leq 62989$  Rs.) are Madhya Pradesh, Jharkhand, Assam, Manipur, Uttar Pradesh, Bihar.

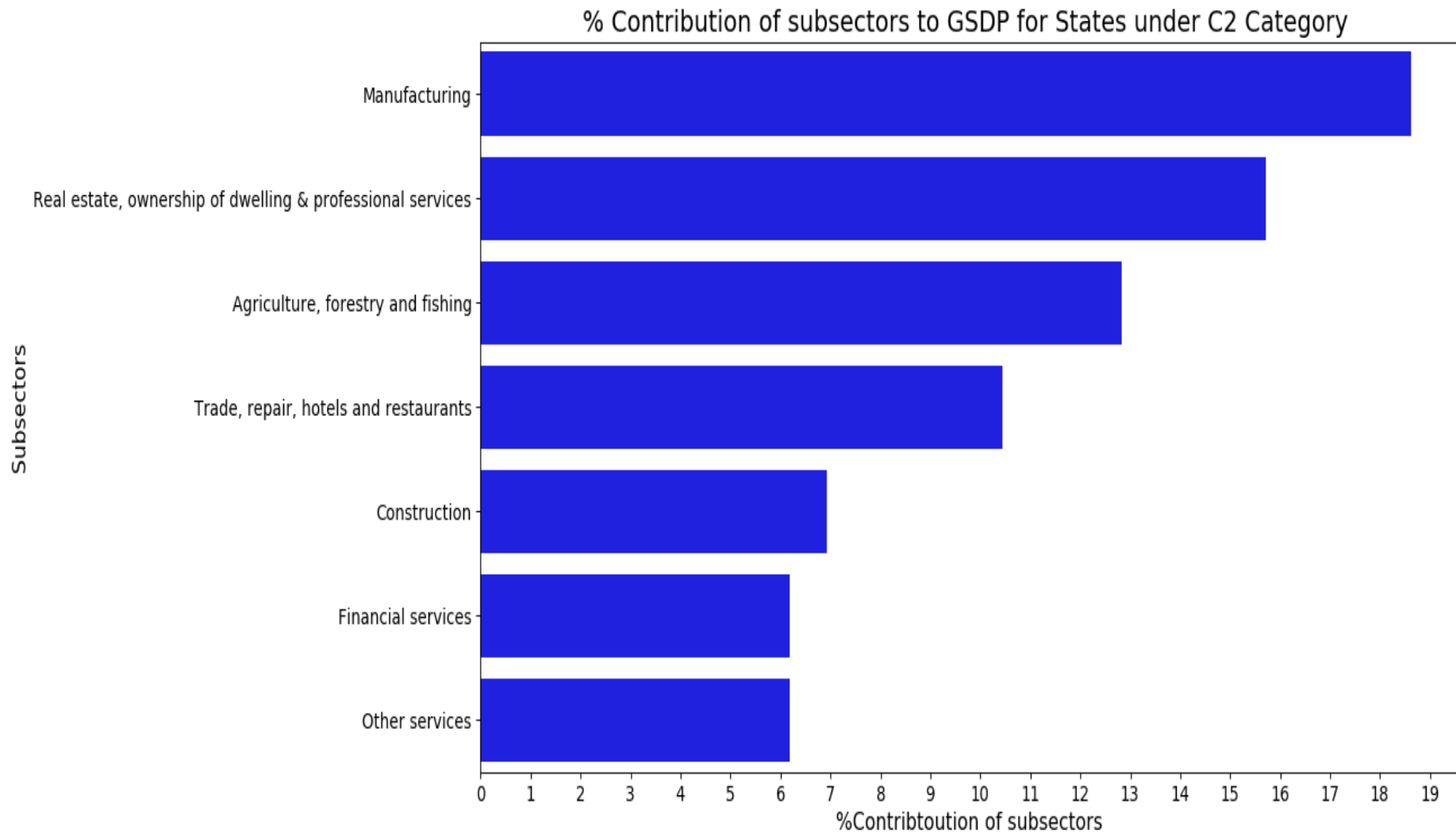
Next are the graphs plotted for the subsectors contributing 80% (approx) towards total GSDP of the states categorywise.

Details of sub-sectors contributing 80%(approx) to total % of GSDP for states from C1 category :

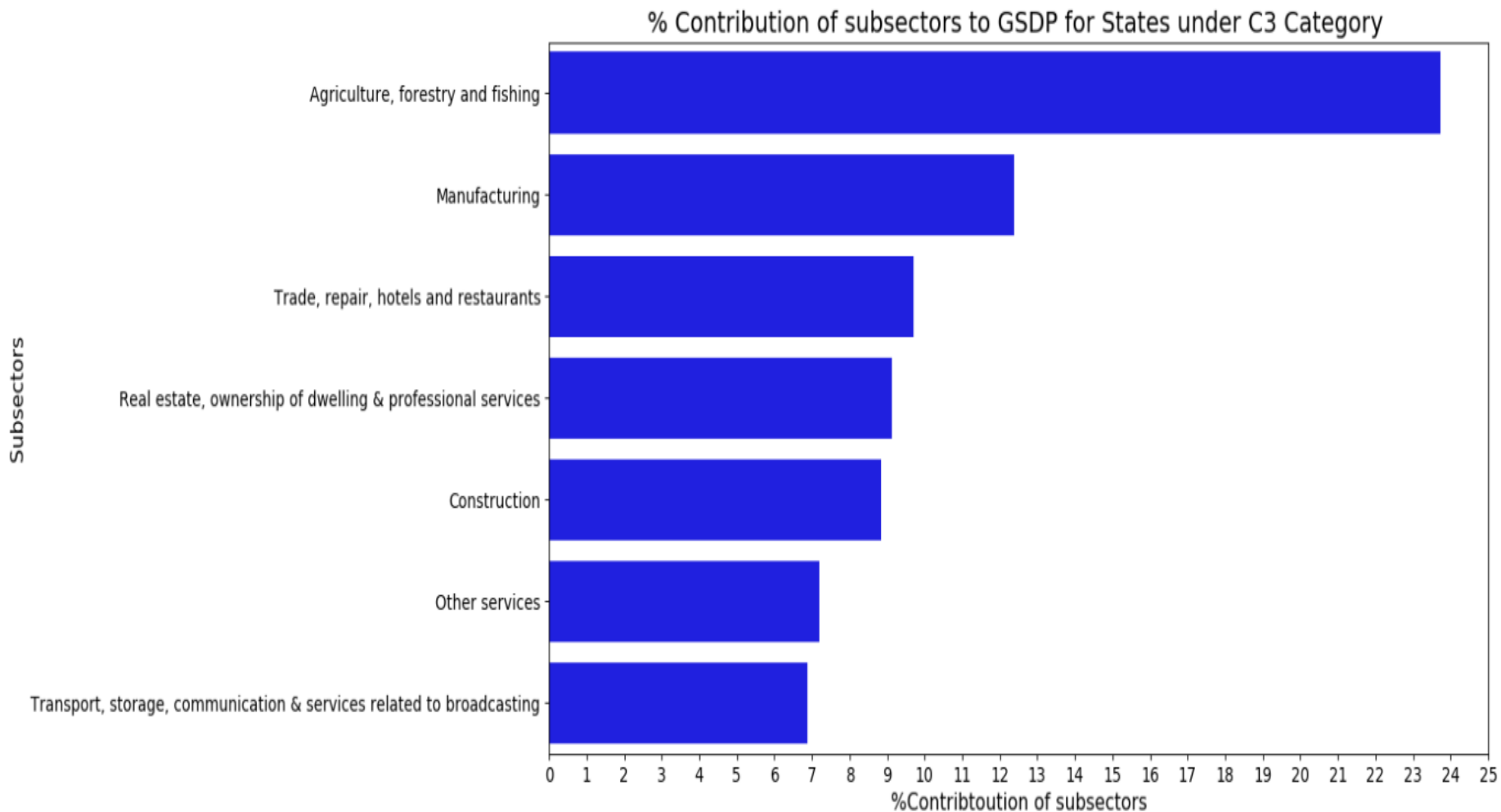
% Contribution of subsectors to GSDP for States under C1 Category



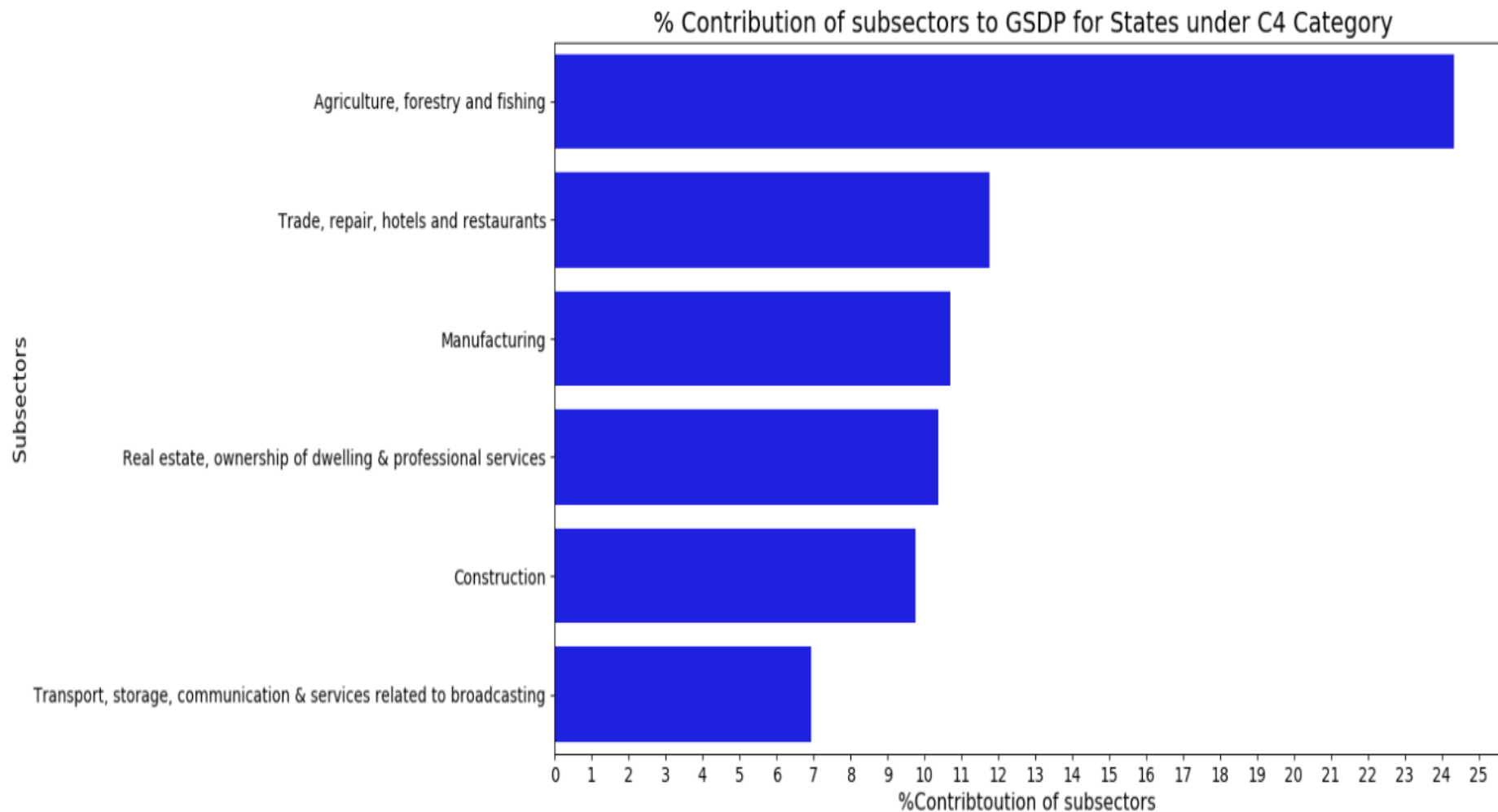
Details of sectors contributing 80%(approx) to total % of GSDP for states from C2 category :



## Details of sectors contributing 80%(approx) to total % of GSDP for states from C3 category :



## Details of sectors contributing 80%(approx) to total % of GSDP for states from C4 category :

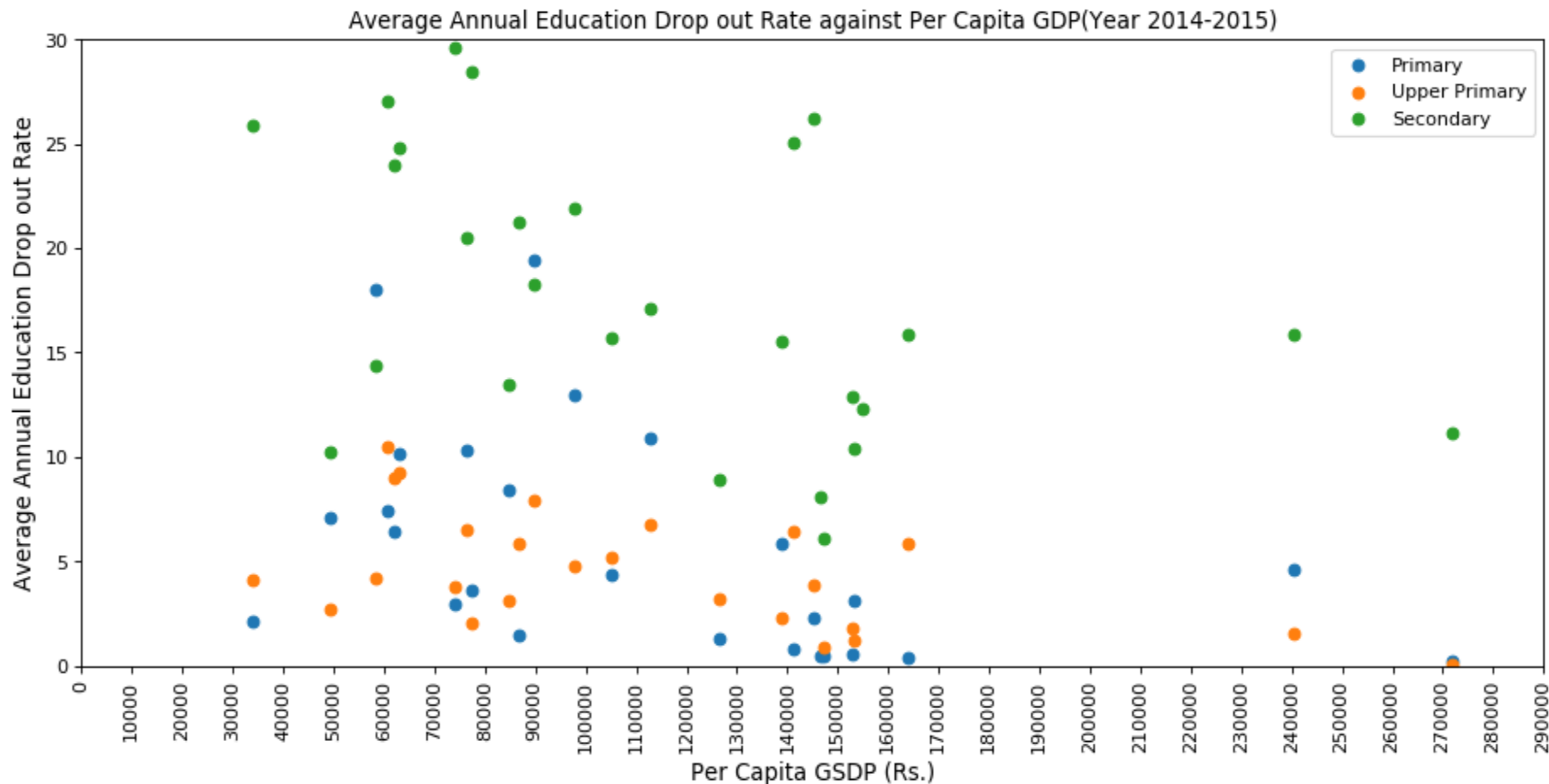


## Key highlights from the graphs plotted for the subsectors contributing 80% toward total GSDP for C1,C2,C3,C4 category :

- 1) For C1 category states, total 5 subsectors are contributing towards 80% of total GSDP. There is no significant difference for four highest contributions, all subsector's are contributing in the range of 13.50 to 14.46 % Real estate, ownership of dwelling & professional services(14.46) followed by Agriculture, forestry and fishing(14.12). **Least is from Construction(11.05)**
- 2) For C2 category states, total 7 subsectors are contributing towards 80% of total GSDP. There is significant difference in contributions from each subsectors. Manufacturing(18.62) followed by Real estate, ownership of dwelling & professional services(15.71). **Least is from Other Services(6.18)**
- 3) For C3 category states, total 7 subsectors are contributing towards 80% of total GSDP. There is huge difference in contributions from subsector at top against bottom. Unlike C1 and C2 category C3 has more contribution from Agriculture sector. Agriculture, forestry and fishing(23.73) followed by Manufacturing (12.38). **Least is from Transport, storage, communication & services related to broadcasting (6.87)**
- 4) For C4 category states, total 6 subsectors are contributing towards 80% of total GSDP. There is huge difference in contributions from subsector at top against bottom. Unlike C1 and C2 category C4 has more contribution from Agriculture, forestry and fishing (primary sector.) Agriculture, forestry and fishing (24.32) followed by Trade, repair, hotels and restaurants (11.78). **Least is from Transport, storage, communication & services related to broadcasting (6.94)**
- 5) Category belong to low GDP per capita (C3 and C4 ) have more contributions from primary sectors .
- 6) Subsector - Real estate, ownership of dwelling & professional services contributing more towards states with high GDP per capita.
- 7) Subsector with least contribution from each sector need to focus on improving the share in contribution.



## Education level drop out rate vs Per Capita GSDP (Rs.) for all states for the year 2014-2015



## **Notes for the graph 'Average Annual Education Drop out Rate against Per Capita GDP' :**

- 1) On x axis ,Per Capita GDP (Rs.) is plotted for all the states for the year 2014-2015 in ascending order
- 2) on Y axis Average Annual Education Drop out Rate for all the states for the year 2014-2015 in ascending order
- 3) Drop out rate is not available for Kerala and its mentioned as NA in datasheet.

### **Key highlights :**

1. For Primary Education Level, drop out rate is high as 19.41% for Nagaland(89607Rs) and lowest as 0.20% for Goa(271793Rs).
2. For Primary Upper Education Level, drop out rate is high as 10.51% for Assam(60621Rs) and lowest as 0.07% for Goa(271793Rs).
3. For Secondary Education Level, drop out rate is high as 29.56% for Odisha(73979Rs) and lowest as 6.07% for Himachal\_Pradesh(147330Rs).
4. However drop out rate is high for the states with range of per Capita GDP(60000 - 150000 Rs) for all primary,upper primary and secondary
5. Among the three, drop out rate for Secondary is highest followed by Primary and Upper Primary education level.

# Recommendations :

## **Improving Per Capita GDP :**

1. C1 category state (Goa, Sikkim, Haryana, Kerala). Among these states Goa, Sikkim & Kerala are popular for tourism . Need to promote more to attract tourists.
2. C2 category most of the states have huge population involved in Agriculture , subsidies to farmers on loans and use of technology in farming should be introduced.
3. For C3 and C4 , subsector Transport, storage, communication & services related to broadcasting should be improved by constructing Roads(national highways) to boost transport, constructing leakproof grain storage buildings for farmers.

## **Education drop out rates :**

- 1.Spread awareness on importance of primary education.
- 2.Education Infrastructure to be improved in the states with range of per capita GDP(60000 - 150000 Rs)
- 3.Introduce education schemes,provide scholarships.
- 4.Spread awareness on employment prospects to boost secondary education