Socio Economic Ranking of Districts of Odisha.

# Aim

The aim of the project was to develop an index that measures and ranks the districts of Odisha on the basis of various socio economic parameters. This ranking helps us in understanding the level of development in different parameters across all districts of Odisha.

# Data collection

The data used for the project was obtained from 2001 National Population census, Annexure 21 and the fields used for this project are:   
1. Distribution of land area (%)  
2. Distribution of Population (%)  
3. Number of females per 1000 males.  
4. Percentage of urban population to total population  
5. Density of population per square kilometres  
6. Literacy Rate   
7. Fertilizer consumption (kg/hectare)  
8. Yield rate of rice (qtl./hectare)  
9. Credit deposit ratio of all Scheduled Commercial Banks  
10. Percentage of villages electrified

# Explaining the data collected

## Distribution of land area

Denoted by (A).  
Contribution to index: A/100  
Gives the percentage of total area of Odisha occupied by the particular district. The larger the area of a district, more land is available for cultivation especially for an agriculture-dominant state like Odisha.

## Distribution of population

Denoted by (B)  
Contribution to index : B/100  
Gives the percentage of the total population of Odisha living in the particular district. The higher the population distribution of a particular district, higher the relative economic development since more people would prefer to live in a better developed environment.

## Number of females per thousand males

Denoted by (C).  
Contribution to index: (C-1000)/1000  
Gives the number of females for every 1000 males in that particular district. It has been observed by economists that a sex ratio greater than 1000 indicates a better level of socio-economic development in a particular region.

## Percentage of urban population to total population

Denoted by (D)  
Contribution to index : D/1000  
Gives the percentage of population living in urban areas to the total population living in that particular district. Generally, a higher percentage of urban population denotes a better level of socio-economic development.

## Density of population per square kilometres

Denoted by (E).  
Contribution to index: (236-E)/(30\*236)   
------------ where 236 is the total population density of Odisha  
Gives the population per square kilometre area in that particular district. The total population density of Odisha is 236. So the districts having population density less than 236 make a positive contribution to the index and vice versa.

## Literacy Rate

Denoted by (F).  
Contribution to index: F/100  
Gives the total percentage of the population of that district aged seven years or above who can read and write with understanding. Higher the literacy rate, more developed a particular district.

## Fertilizer consumption (kg/hectare)

Denoted by (G).  
Contribution to index : (G-49.73)/(30\*49.73)  
------------ where 49.73 is the total fertilizer consumption per hectare of Odisha  
Gives the consumption of fertilizer per hectare of farm area in a particular district. According to leading economists, Higher the consumption of fertilizers better the level of economic development in a particular district.

## Yield rate of rice (Qtl./hectare)

Denoted by (H)  
Contribution to index: (H-10.41)/(30\*10.41)  
------------ where 10.41 is the total yield rate of Odisha  
Gives the quantity of rice obtained per hectare of farm in a particular District of Odisha. Rice is the staple food in Odisha and paddy is the prime source of income. Hence higher the yield rate, more developed is the particular district.

## Credit deposit ratio of all Scheduled Commercial Banks.

Denoted by (I)  
Contribution to index: ((25-I)(I-73))/10000  
------------ where 25 and 73 are the minimum and maximum threshold values of credit deposit ratio. A good credit deposit ratio should lie between 25&73.  
Gives the ratio of how much a bank lends out of the deposits it has mobilized. It indicates how much of a bank's core funds are being used for lending, the main banking activity. A higher ratio indicates more reliance on deposits for lending and vice-versa. Credit deposit ratio of a particular district makes a positive contribution to index if it lies between 25 and 73 and a negative contribution if it doesn’t.

## Percentage of villages electrified

Denoted by (J)  
Contribution to index: J/100  
Gives the percentage of total villages electrified in a particular district. Higher the percentage more the level of economic development in a particular district.

# Calculation of index

The index calculation is done as follows.  
Index value : A/100 + B/100 + C/100 + D/100 + (236-E)/(30\*236) + F/100+(G-49.73)/(30\*49.73) + (H-10.41)/(30\*10.41) + ((25-I)(I-73))/10000 + J/100

# Ranking the districts

Higher the index value of a particular district, better the level of socio economic development in that particular district.

# Results

Khordha is the top ranking district according to our calculated index value whereas Malkangiri is the least ranked.