

A GEOGRAPHICAL ANALYSIS OF WORK DEPENDENCY IN CHAMARAJANAGAR DISTRICT

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Abstract

The quality and quantity of labour force determines the economic, social, cultural and political development of any country. The quality and quantity of workforce is not uniform in the world. It changes from place to place and time to time. The study of work dependency is useful for socio-economic development of a region. In demographic studies the term working population or economically active population are used synonymously. Here an attempt has been made by the scholars to study the crude work participation rate in different taluks of Chamarajanagara district for different time periods and also the pattern and trend of work participation rate. Through Thematic maps, these spatial and temporal changes have been shown.

Keywords: Crude work participation rate, Work dependency, Dependency ratio, Main and Marginal workers.

Introduction

The population of a country is also considered as Human Resource. Because they are producer and consumer of goods. Children, aged persons and some of the differently abled people are not capable to produce goods and services. The people who can produce goods and services constitute the human resource of any region. There is a division of population like dependent and independent.

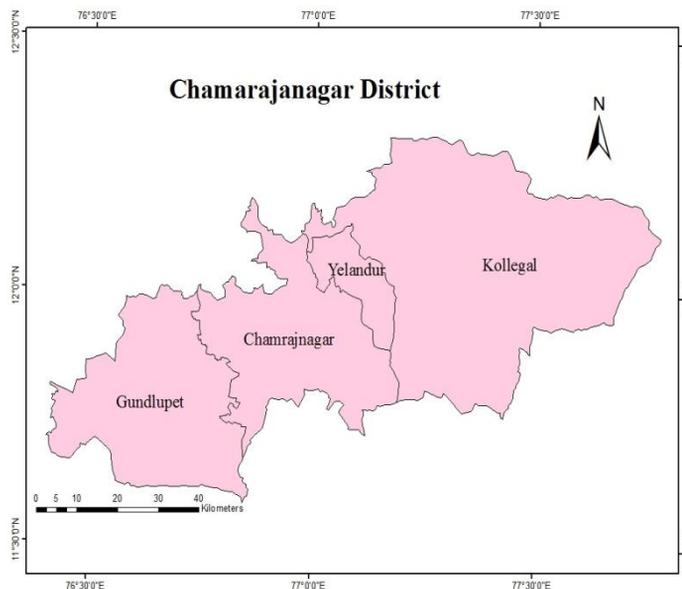
The population can be classified as economically active or workers and economically inactive or non-workers. The relationship between the proportion of workers and non-workers is expressed in terms of a ratio, which is known as '**Dependency Ratio**'. It shows the number of non-workers per worker. High dependency ratio reflects several aspects of economic and social. Low dependency ratios indicate a high degree of work opportunities and economic activeness of the population. But it has several limitations like children and old age group of people are not uniformly distributed. The children who are going to schools and colleges also cause disequilibrium in the dependency ratio.

Study area

In 1997, Chamarajanagara district has been carved out from old Mysore District. Chamarajanagara, Gundlupet, Kollegala and Yelandur taluks were transferred to a newly formed district. It consist 16 hoblis, 130 Grama Panchayaths, 433 inhabited villages and 81 Uninhabited villages. It covers an area of 5671.71 km² of area. It extends from 76° 43' N to 77° 46' North Latitudes, 11° 35' E to 12° 18' East Longitudes. Kollegala is the largest taluk (2785.82 km²) and Yelandur is the smallest taluk (266.34 km²) in the district. The district has 10,20,791 population in 2011 census which accounts 1.67% of the state and ranks 28th place among the districts of the state. The district has a sex ratio of 993 females per 1000 males according to 2011 census. Highest sex ratio is found in Gundlupete taluk (1008 females per 1000 males) and lowest is in Kollegala taluk (973 females per 1000 males). The sex ratio in urban area is more than (1003 females per 1000 males) the rural area (991 females per 1000 males). The district has a literacy rate of 61.43% and ranks 28th place in

the state. The highest literacy rate is found in Kollegala (63.63%) and lowest is in Chamarajanagara (59.96%) taluk. The male literacy rate is about 67.93% and female literacy rate is 54.92% in the district according to 2011 census. Mandya, Mysuru, Bangalore (Rural) are located towards North and North-west of this district, Tamilnadu state in the East & South, Kerala state towards South-west and West.

Figure 1. Study area



Objectives

To observe the spatio-temporal changes of population growth rate in the study area. To understand the spatial distribution of Work Dependency ratio at taluk level. To know the temporal changes in work dependency in the study region.

Methodology

For this study, the secondary data has been collected from the reports of Census of India, Chamarajanagara District at a Glance and Mysore District Gazetteer. Simple statistical tools are used for analysis. Thematic maps are used for comparison of spatial and temporal changes in the region.

Population

Before moving to understand work dependency, first we have to know the trend and pattern of population growth rate in the taluks of Chamarajanagara district for five decades. In 1971, the district decadal population growth rate was 15.50%. In rural area it is slightly higher than (15.52%) the district average and in urban area it is less than (15.39%) this. Gundlupete has highest population growth rate (18.37%) and Yelandur taluk has lowest population growth rate (8.60%) in the district during this period. Yelandur taluk has recorded more rural population growth rate (25.72%) compared to other taluks of the district. But the urban population growth rate has significantly less in this taluk (-49.70%).

In the next decade (1981), the population growth rate has significantly increased in all the taluks of the district. More than 9% of population growth rate has been observed in the district during this period. Highest population growth rate is found in urban areas of the district. Yelandur which recorded negative population growth rate in urban area in the previous decade, now it has recorded +30.75% during this period. The urban population of this taluk has increased from 5132 to 6710 during this decade. But Kollegala taluk has recorded 25.79% of urban population growth rate which is slightly lesser than the previous decade. But the it has recorded 21.96% of population growth rate in rural area as shown in table -1.

Table 1. Trend of Population growth rate (%) of Chamarajanagara District (1971 to 2011)

SI No	Year	Rural	Taluks				DISTRICT
		Urban	Chamrajanagara	Gundlupete	Kollegala	Yelandur	
1	1971	Rural	16.59	17.56	10.69	25.72	15.52
		Urban	27.18	25.66	26.66	-49.7	15.39
		Total	17.93	18.37	12.72	8.6	15.5
2	1981	Rural	18.52	19.7	32.65	25.17	23.87
		Urban	30.1	35.43	25.79	30.75	29.58
		Total	20.1	21.36	31.67	25.76	24.6
3	1991	Rural	14.56	15.37	12.46	17.08	14.23
		Urban	10.09	19.71	31.82	14.75	19.86
		Total	13.9	15.88	15.1	16.82	14.98
4	2001	Rural	3.83	8.7	10.6	8.42	7.61
		Urban	36.08	10.21	10.52	11.49	19.72
		Total	8.44	8.88	10.58	8.75	9.3
5	2011	Rural	3.94	4.4	1.9	6.53	3.56
		Urban	15.38	6.7	29.67	2.26	18.15
		Total	5.99	4.69	6.24	6.06	5.8

Source: Mysore District Gazetter (1986), District at a Glance (15-16).

During 1991, the population growth rate has significantly reduced in the entire district (-9.62%). It has been observed in all the taluks, both in rural and urban areas. The same trend has been continued in 2001 census also. In rural area, it has been reduced to 7.61% from 14.23%. Chamarajanagara taluk has more declining trend of population growth rate in rural area (-10.73%) compared to previous census. But the same taluk has shown a phenomenon increase of urban population during this period (10.09% to 36.08%). Between 1991 to 2001 the urban population has increased for about 16,000 in this taluk. It may be due to when Chamarajanagara town became the district headquarter in 1997.

In 2011, the population growth rate has further reduced to 5.80% with decrease of 3.5% compared to 2001 census. All the taluks of the district have shown declining trend during 2001 to 2011 has observed in table-1. But Kollegala town has recorded increase of Urban population during this period (from 10.52% to 29.67%). These variations are shown in figure 2.0.

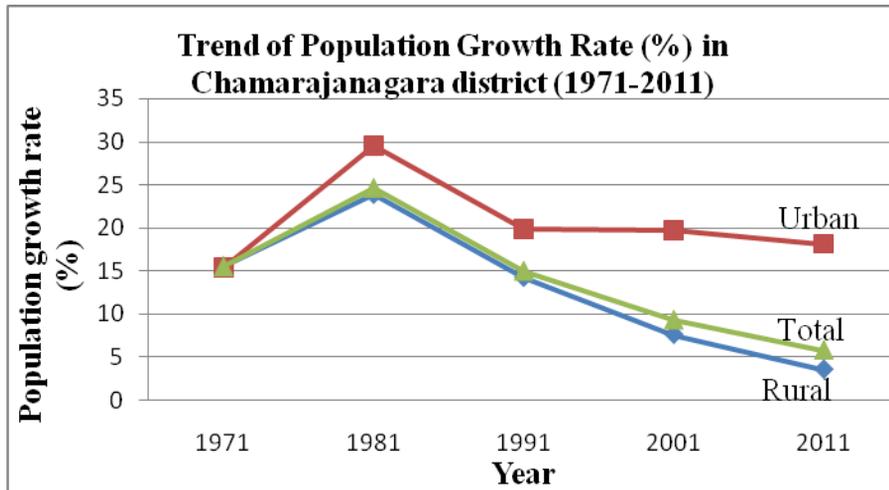


Figure 2. Trend of population growth rate

Work Dependency Ratio:

According to census of India, the term work defined as 'Participation in any economically productive activity with or without compensation wages or profit'. It also consist the supervision and direction given to other workers.

The concept of 'Work' in Indian census was introduced since 1961. In 1981, the census of India has classified the workers into two types. They are –

Main Workers: The person who engaged in any economically productive activity for more than six months in the last year is known as Main worker.

Marginal Worker: The person who has worked less than six months in the last year is called Marginal Workers.

During 1981 and 1991 census, workers were classified into NINE categories (Cultivators, Agricultural labours, Livestock, Forestry, Fishing, Hunting, Plantation, Orchards and allied activites, Mining and Quarrying, Manufacturing and repairs, Household industries, other than house hold industries, construction, trade and commerce, transport, storage and communication and services).

In 2001 and 2011 census, Workers are grouped into Four types. They are – Cultivators, Agricultural Labours, House hold industrial workers and other workers.

Work dependency can be calculated by adding main and marginal workers. It has been worked out by using the following formula.

$$\text{Work Dependency Ratio} = \frac{\text{No. of Non-workers}}{\text{No. of Workers}} \times 100$$

By using this formula the dependency ratio has been worked out as shown in table-2. It has been classified into 3 categories. They are- 1. Low Dependency Ratio: (< 125%). 2. Moderate Dependency Ratio: (126% to 150%). 3. High Dependency Ratio: (> 150%).

Low Dependency Ratio: It can be defined as less than 125 non-workers are depending on 100 workers. Low dependency is found among males in all the taluks of this district during 1991. The district's average male dependency ratio is about 67.57%. Compared to urban areas of the taluks, the male dependency ratio is less in rural areas. Low dependency ratio is found in rural areas of Gundlupete, Yelandur and Kollegala taluk. Highest dependency is

found in all the urban areas of the district. It is maximum in Chamarajanagara and Kollegala Urban areas compared to other two urban areas.

After 20 years, there is little change in the dependency ratio in the district. Except Yelandur taluk, all other taluks have recorded low dependency ratio. In rural areas, Gundlupete, Kollegala and Chamarajanagara taluks have low dependency ratio, it is moderate in Yelandur taluk. It has been observed that dependency among males have further reduced during this period both in rural and urban areas.

Moderate Dependency Ratio: Here, 126 to 150 non-workers are depending on every 100 workers (126 to 150%). In 1991, the district has a moderate dependency ratio (127.81%). Chamarajanagara and Kollegala taluks have moderate dependency, while rest of the taluks has low dependency during this period.

In 2011, the district has low dependency ratio (111.92%). Yelandur is the only taluk which has moderate dependency in both rural and urban areas during this time. In other taluks, it has been significantly reduced and they are having low dependency ratio as observed in table-2.

Table 2. Dependency Ratio (%) between 1991 and 2011 among the taluks of Chamarajanagara District

S I. N o	Taluks	Rural / Urban / Total	1991			2011		
			Male	Female	Total	Male	Female	Total
1	Chamarajanagara	Rural	63.99	301.45	130.90	53.20	230.09	109.37
		Urban	101.54	849.01	222.00	73.06	467.19	165.83
		Total	68.59	336.48	140.62	56.70	259.52	118.43
2	Gundlupete	Rural	54.64	177.86	100.78	49.46	186.64	96.72
		Urban	93.03	541.92	193.49	72.60	435.95	161.47
		Total	61.31	198.30	108.84	52.02	204.46	103.05
3	Kollegala	Rural	67.07	238.67	121.25	60.29	162.52	98.25
		Urban	96.65	586.37	200.58	70.32	417.76	156.14
		Total	70.70	264.90	129.84	62.09	190.12	107.17
4	Yelandur	Rural	65.95	225.42	118.39	61.47	310.84	131.43
		Urban	83.02	516.44	174.41	68.53	327.17	141.65
		Total	67.67	242.20	123.27	62.19	312.53	132.48
DISTRICT	Rural	63.72	239.13	119.17	53.38	198.65	104.11	
	Urban	96.77	646.92	204.82	71.68	222.08	159.99	
	Total	67.57	265.68	127.81	57.94	223.17	111.92	

Source: Mysore District Gazetteer, District at a Glance (15-16).

High Dependency Ratio: It means that more than 150 non-workers are depending on 100 workers. During 1991, urban areas of all the taluks have high dependency ratio. It is 204.82% in the district and it is maximum in Chamarajanagara urban area (222.0%). It has been observed that the female dependency ratio in all the taluks of the district comes under this category. It is found that female dependency is maximum in urban areas of the district. It is 646.92% in the district. Chamarajanagara urban area has highest female dependency (849%) in the entire district. In 2011, except Yelandur in all other urban areas of the taluks have high dependency ratio. It has been significantly reduced from 204.82% to 159.99% in urban areas during the last 20 years. In all the urban areas, there is a significant decline in dependency ratio as shown in table-2. The dependency ratio among females are also reduced from 646.92% to 222.08% during this period. More decline is found in urban areas

compared to rural areas. But dependency ratio among males (57.94%) is very less compared to females (223.17%) in the district. These changes can be noticed in figure-3 and 4 respectively.

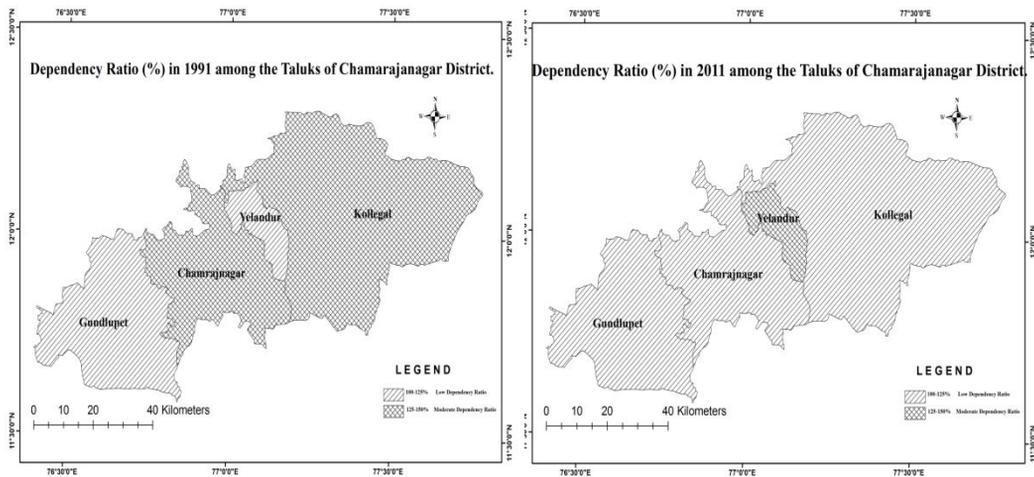


Figure 3 & 4. Dependency ratio in 1991 and 2011.

Findings and Conclusions

The dependency ratio is one of the key elements of social and economic status of a region. The major findings of this period are- The dependency ratio has been declined from 127.81% to 111.92% during these two decades. More declining trend has been noticed in urban areas. It is declined from 204.82% to 160%. Highest reduction has been observed in female dependency ratio in urban areas. It is declined from 646.92% to 222.08%. Chamarajanagara urban area has recorded highest decline in urban female dependency from 849% to 467% during these two decades. It shows that females are actively involving in various economic activities in the study area. It is also noticed that the male dependency is also decreasing in all the taluks of the district both in urban and rural areas. It clearly shows that the dependency ratio is decreasing in recent decades. It is more evident among females. These factors highlight that more number of people are engaging in different economic activities in the study area. Female workers are significantly increased during this period, which indirectly shows that more and more women are engaging in different economic activities. They are significantly contributing to the development of a region.

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