# LOCATIONAL PATTERN OF SLUMS IN BELAGAVI CITY: A GEOGRAPHICAL ANALYSIS

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*Abstract*

*Slums and squatters are considered as problem areas for urban development in Developing countries. Slum may be defined as a "compact settlement with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions" (NSSO, 2003). The location of slums is one of the serious problems in urban planning. In Belagavi city slums are located in private land, government land, and municipal land. Slum dwellers have a tendency to live near their work place and so we can see most of them are located near Railway Station, Bus stand, Market yard, Industrial area etc. In the study region slums are named as "Kolageri". They are more concentrated in Market, Industrial and Residential areas. Some other slums are dispersed all over the city. But the large slums are found near market area, New Gandhi Nagar slum which is in Ward number 50 having highest population about 8173 and lowest population is found in Kanakdas Nagar which is in Ward no 13 having population about 143. In Belagavi city, there are 58 municipal wards. Among these 51 slums are located in 30 wards and these are divided as notified and non-notified slums. There are 32 notified and 19 Non-notified slums, population of both slums is 57214 and number of households in slums is 12082.Total population of the Belagavi city is 4,90045 and the percentage of the slum population is 11.67%. In the present study an attempt is made to know the Geographical locations of slums and their distribution.*

*Keywords: Slum, Squatters, Notified, Non-notified, locational Pattern.*

## Introduction

Urban Poverty and Slums are the most critical problems of urban development today. Slums are illegally occupied houses and creating a nuisance of environmental pollution and degradation of urban living conditions. Mostly such slums develop because of rapid rural-urban migration, increasing urban poverty and inequality, marginalization of poor neighborhoods, inability of poor people to have access to affordable land for housing, insufficient in low income housing and poor maintenance of existing housing stock (U.N.Habitat, 2003). With the growth of urban population nowadays slums have created a panic for cities development. It has been a serious issue for the town planning not only in India but in Europe and North America as well-slums are the marginal area of cities where the service facilities are poor, people are illiterate , drinking water supply is miserably on the lowest ebb and the vice of underworld's predominate the scene. The study of slums and squatters is meaningful for the environmental modification and ameliorating the problems of urban areas for providing more amenities to the elling masses (Mandal.R.B, 2000).The presence of a slum as a part of urban habitat refers to a condition of defective physical, social and economic environment. It means physically poor quality sub-standard housing characterize slum areas which pose danger of health and life of degenerated living "an abode of half starved, a place of poverty, wretchedness and vice, the house of racketeers and criminal" and so on. Slum emerges with in relatively big urban centers and always tends to grow and multiply.

## Study Area

Belagavi city is located at 15°.52'12"N 74°.5'E. It has an average elevation of 751 metres (2463 feet). The city is situated in the north-western parts of Karnataka and lies at the border of two states, Maharashtra and Goa on the western part (50 km from Goa state border). It is one of the oldest cities in the state, lying at a distance of 502 km from Bangalore 515 km from Hyderabad and 500 km from Mumbai. Situated near the foothills of the Sahyadri mountain range (Western Ghats) at an altitude of about 779m, 100 km from the Arabian Sea with the river Markandeya flowing nearby, Belagavi exhibits swift and kaleidoscopic changes in topography, vegetation and climate. (Fig.1)
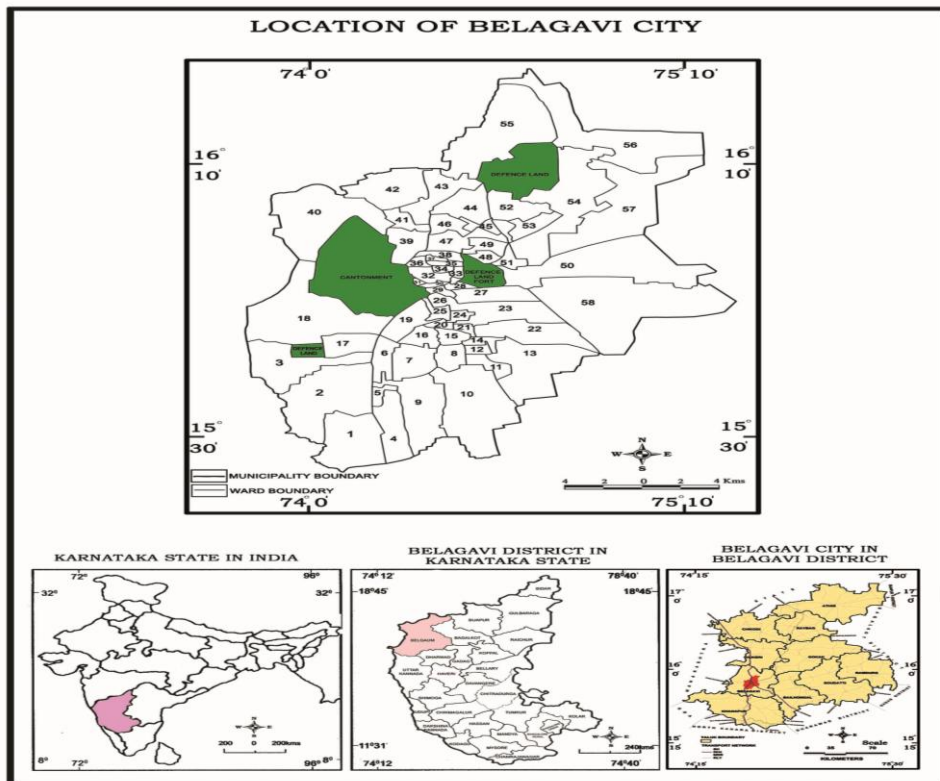


**Figure 1. Study area.**

## Objectives

Main Objectives of the present study are: To study and specify the slums in the region. To study the ownership of land and location of slums. To analyse the distributional pattern of slums in Belagavi city.

## Database and Methodology

The present study is mainly based on the secondary data. For the specification of slums in the study region investigators have used data collected from Slum Clearance Board. To identify the location of each slum, data collected by Asha Kiran Mahithi Information is made use of.

## Table 1: Ward Wise Distribution of Slums in Belagavi City

| Sl No | Ward No. | Name of Slum | Area | (%) | Population | (%) | House holds | (%) |
|---|---|---|---|---|---|---|---|---|
| 1 | 1 | Ambetkar Nagar,Majagaon(NN), Brhamdev Nagar,Majagaon(NN)* | 0.065 | 2.78 | 1624 | 2.83 | 367 | 3.03 |
| 2 | 2 | Rajaram Nagar, Udyambag(N)* | 0.026 | 1.11 | 608 | 1.06 | 132 | 1.09 |
| 3 | 3 | Rohidas Nagar(N) | 0.005 | 0.21 | 579 | 1.00 | 137 | 1.13 |
| 4 | 4 | Nath pai Nagar(N) | 0.009 | 0.38 | 1267 | 2.21 | 311 | 2.57 |
| 5 | 5 | Zapat Nagar,Belagavi(N) | 0.022 | 0.94 | 1793 | 3.13 | 392 | 3.24 |
| 6 | 6 | Indira Nagar(N), Bhajanthri Galli(N), Kurabar Galli, Anagol(N), Waddar Galli,Anagol(N), Ambetkar Nagar,Angol(N), Harijankeri,Angol(N) | 0.044 | 1.18 | 5284 | 9.23 | 1208 | 9.99 |
| 7 | 9 | Nazar Camp,Harijan Wada(N) | 0.012 | 0.51 | 498 | 0.87 | 111 | 0.91 |
| 8 | 10 | Mangai Nagar(NN),Vadagaon, Ranajunjar colony(NN),Vadagaon, Ganesh Nagar(NN),Vadagaon, Patil Galli,Waddar Chavani(N) | 0.042 | 1.79 | 2213 | 3.86 | 485 | 4.01 |
| 9 | 12 | Kallyan Nagar,Vadagaon(N), Teggin Galli,Waddar Chavani Vadagaon(N) | 0.024 | 1.02 | 1144 | 1.99 | 265 | 2.19 |
| 10 | 13 | Kanaka Das Nagar(NN),Vadagaon, Kalmeshwar Nagar(NN) Vadagaon, Devang Nagar(NN)Vadagaon, Laxmi Nagar,Vadagaon(N), Malaprabha Nagar,1st stage(N), Malaprabha Nagar,2nd stage(N) | 0.657 | 28.11 | 7573 | 13.23 | 1628 | 13.47 |
| 11 | 14 | Hindwadi Waddar Chavani(N) , Dhor Galli,Waddar Chavani(N) | 0.014 | 0.59 | 836 | 1.46 | 183 | 1.51 |
| 12 | 20 | Patil Galli,Kasabag(NN) | 0.044 | 1.88 | 845 | 1.47 | 178 | 1.47 |
| 13 | 21 | Waddar Galli,Khasbag(N) | 0.063 | 2.69 | 2240 | 3.91 | 410 | 3.39 |
| 14 | 22 | Kunthi nagar Near teachers colony Khasabag(NN) | 0.008 | 0.34 | 623 | 1.08 | 131 | 1.08 |
| 15 | 23 | Harijan Wada,Khasabag(NN) | 0.2 | 8.55 | 380 | 0.66 | 79 | 0.65 |
| 16 | 32 | Ganpat Burud Galli (Behind Huns Talkies) (N) | 0.002 | 0.08 | 174 | 0.30 | 39 | 0.32 |
| 17 | 33 | Kasai Galli(N) | 0.003 | 0.12 | 2518 | 4.40 | 490 | 4.05 |
| 18 | 38 | Chavat Galli Dorwada (N) | 0.006 | 0.25 | 880 | 1.53 | 190 | 1.57 |
| 19 | 39 | Kaliambrai(Matang colony) (N) | 0.004 | 0.17 | 953 | 1.66 | 201 | 1.66 |
| 20 | 41 | Beldar Chawani(N) | 0.005 | 0.21 | 332 | 0.58 | 70 | 0.57 |
| 21 | 43 | Nehru Nagar(Burud Galli) (N) | 0.007 | 0.29 | 440 | 0.76 | 82 | 0.67 |
| 22 | 46 | Ramanagar Waddarwadi(N), Gangwadi (Waddar colony) (N) | 0.054 | 2.31 | 3628 | 6.34 | 747 | 6.18 |
| 23 | 49 | Shivaji Nagar (NN) | 0.2 | 8.55 | 1084 | 1.89 | 239 | 2.42 |
| 24 | 50 | Old Gandhi Nagar(NN), Maruti Nagar(NN) Bijapur Road, New Gandhi Nagar(N) | 0.132 | 5.64 | 10605 | 18.53 | 1951 | 16.14 |
| 25 | 51 | Shrinagar,Jopadpatti(NN) | 0.03 | 1.28 | 310 | 0.54 | 75 | 0.62 |
| 26 | 52 | Vantumuri Ashray Colony(NN) | 0.1 | 4.27 | 1661 | 2.90 | 363 | 3.00 |
| 27 | 54 | Rukmini Nagar Ashrya colony(NN), Rukmini Nagar(Kasai Galli) (N), Konchi Korawar Galli(N) | 0.469 | 20.05 | 4276 | 7.47 | 950 | 7.86 |
| 28 | 55 | Gandhinagar (Near Vaibhav Nagar Church) (N) | 0.016 | 0.68 | 705 | 1.23 | 145 | 1.20 |
| 29 | 57 | Kanabargi Extention(NN) | 0.014 | 0.59 | 1565 | 2.73 | 392 | 3.24 |
| 30 | 58 | Alarwad Ashray colony(NN) | 0.06 | 2.56 | 576 | 1.0 | 131 | 1.08 |
| | Total | 51 | 2.337 | 100% | 57214 | 100% | 12082 | 100% |

(NN)*:Non-Notified  (N)*: Notified

## Slums in Belagavi City

Belagavi city is extended about 94sq.km.  There are 58 municipal wards in Belagavi city. In these municipal wards, 51 slums are emerged which cover an area about 2.337sq.km. These slums are divided in two types as Notified (Declared) and Non-notified (Un-Declared) Slums. There are 32 Notified slums and 19 Non-notified slums. Total population of Belagavi city is 4.90 lakh and total slum population is 57,214. It accounts for 11.67% of total

population of the city. Slum dwellers are living in an un-healthy environment and neglected area of the city because; they cannot afford houses in standard area. Thus, they are living in sub standard areas as these localities are nearer to their workplace. Further, land is available here either at low price or free of cost.

**Ward Wise Distribution of Slums**
A detailed view of the ward vise distribution of slums is given in the table 1. There are 58 municipal wards among them slums are found in 30 wards. Ward number 50 is having largest slum population which accounts for about 18.53%. Ward no. 13 is having second highest population with 13.23% of total slum population. Although, ward no. 6 is having more number of slums its population is low compared to ward number 50 and 13. Next to these slums ward no. 33 Kasai galli is having slum population 4.40% and Waddar galli Kasabag which is located in ward no 21 having population about 3.91% . Zapat nagar 3.13% Nath pai nagar 2.21% slums are found in Ward no. 5 these slums are having low population. In Belagavi city, lowest slum population is found in Ward no. 32 where is Ganpath burud galli slum. It accounts for about 0.30% of slum population. The smallest slum Kanak Das nagar Vadgaon is found in 13$^{th}$ ward which is having only 0.24% of slum population

In Belagavi city some wards are having largest area under. Particularly ward no 13 is having a large slum area which accounts for about 28.11% of the total area under slums in the city. In Ward no.54, is having 20.05% of area. Ward no. 23 and 49, is having 8.55% of area under slum. In ward no. 54, Rukmini Nagar (Ashrya colony) is the biggest slum 19.25% of area.

Apart from these wards, ward no.50 and 52 are having fourth and fifth rank. In ward no. 50 New Gandhi Nagar slum located which covers an area of 4.45% and ward no. 52 Vantumuri Ashray Colony slum is covered an area of 4.27%. Lowest area under slums is found in ward no. 32, where is Ganpat Burud Galli (Behind Huns Talkies) slum i.e 0.08%.

As far as households of the slums are concerned, ward 50 is in the first place with 16.14% of total households of the slums in Belagavi city. New Gandhi nagar is in second place with 12.15% of slum households. Laxmi nagar,Vadagaon which is Ward no. 13 ranks Third with 7.83% of slum households. Kanaka Das Nagar,Vadagaon slum accounts for least number of household, where only 0.23 % of households are found (Table 1)

**Table 2: Belagavi city :Land ownership of Slums**

| Land Ownership | Private | State Government | Local Body | Others | Total |
|---|---|---|---|---|---|
| Number of Slums | 33 | 6 | 9 | 3 | 51 |
| Percentage | 65% | 12% | 17% | 6% | 100% |

**Source: Slum Clearance Board,Asha Kiran Mahithi, Belagavi District 2012 and Computed by the Researcher.**

# Land ownership of Slums
The ownership of land slums indicates that whether slum is existed on private land or on the government land. In Belagavi city, large number of slums is existed in the land which is under Private ownership. 65% of the slums are grownup in private land. 17% slums are found in local bodies like Municipal corporation and society. Land owned by State Government accounts for 12 % of the slums. And 6% of slums are existing in the area belonging to other categories. These are mainly Non-notified slums and non-permanent slums as they are

originated recently in the study area. Dwellers of these slums are shifting their residence here and there frequently. As mentioned earlier, 65% of the slums are on private lands. But, the slum dwellers have possession certificates. However, they are considered eligible for slum redevelopment programmes on the basis of the varying economic status of those dwellers.

Table 3 . Location of Slums

| Location | Industrial Area | Market Area | Residential Area | Road & Railway Side | Others | Total |
|---|---|---|---|---|---|---|
| Number of Slums | 8 | 8 | 21 | 11 | 3 | 51 |
| Percentage | 16% | 16% | 41% | 21% | 6% | 100% |

**Source: Slum Clearance Board, Belagavi District 2012 and Computed by the Researcher.**

Table 4: Location Pattern of Slums

| Location of the Slum | Sl No | Name of Slum | Ward Number | Slum Area | (%) | Slum Population | (%) | Slum Household | (%) |
|---|---|---|---|---|---|---|---|---|---|
| Industrial Area | 1 | Rajaram Nagar, Udyambag(N)* | 2 | 0.026 | 1.11 | 608 | 1.06 | 132 | 1.09 |
| | 2 | Indira Nagar(N), Bhajanthri Galli(N), Kurabar Galli, Anagol(N), Waddar Galli,Anagol(N), Ambetkar Nagar,Angol(N), Harijankeri,Angol(N) | 6 | 0.044 | 1.18 | 5284 | 9.23 | 1208 | 9.99 |
| | 3 | Gandhinagar (Near Vaibhav Nagar Church) (N) | 55 | 0.016 | 0.68 | 705 | 1.23 | 145 | 1.20 |
| | | | Total | 0.086 | 3.64 | 6597 | 11.49 | 1485 | 12.25 |
| Market Area | 1 | Ganpat Burud Galli (Behind Huns Talkies) (N) | 32 | 0.002 | 0.08 | 174 | 0.30 | 39 | 0.32 |
| | 2 | Kasai Galli(N) | 33 | 0.003 | 0.12 | 2518 | 4.40 | 490 | 4.05 |
| | 3 | Chavat Galli Dorwada (N) | 38 | 0.006 | 0.25 | 880 | 1.53 | 190 | 1.57 |
| | 4 | Kaliambrai(Matang colony) (N) | 39 | 0.004 | 0.17 | 953 | 1.66 | 201 | 1.66 |
| | 5 | Vantumuri Ashray Colony | 52 | 0.1 | 4.27 | 1661 | 2.90 | 363 | 3.00 |
| | 6 | Rukmini Nagar Ashrya colony(NN)*, Rukmini Nagar(Kasai Galli) (N), Konchi Korawar Galli(N) | 54 | 0.469 | 20.05 | 4276 | 7.47 | 950 | 7.86 |
| | | | Total | 0.584 | 24.94 | 10462 | 18.25 | 2233 | 18.45 |
| Residential Area | 1 | Ambetkar Nagar,Majagaon(NN), Brhamdev Nagar,Majagaon(NN)* | 1 | 0.065 | 2.78 | 1624 | 2.83 | 367 | 3.03 |
| | 2 | Nazar Camp,Harijan Wada(N) | 9 | 0.012 | 0.51 | 498 | 0.87 | 111 | 0.91 |
| | 3 | Mangai Nagar(NN),Vadagaon, Ranajunjar colony(NN),Vadagaon, Ganesh Nagar(NN),Vadagaon, Patil Galli,Waddar Chavani(N) | 10 | 0.042 | 1.79 | 2213 | 3.86 | 485 | 4.01 |
| | 4 | Kallyan Nagar,Vadagaon(N), Teggin Galli,Waddar Chavani Vadagaon(N) | 12 | 0.024 | 1.02 | 1144 | 1.99 | 265 | 2.19 |
| | 5 | Kanaka Das Nagar(NN),Vadagaon, Kalmeshwar Nagar(NN) Vadagaon, Devang Nagar(NN)Vadagaon, Laxmi Nagar,Vadagaon(N), Malaprabha Nagar,1st stage(N), Malaprabha Nagar,2nd stage(N) | 13 | 0.657 | 28.11 | 7573 | 13.23 | 1628 | 13.47 |
| | 6 | Hindwadi Waddar Chavani(N) , Dhor Galli,Waddar Chavani(N) | 14 | 0.014 | 0.59 | 836 | 1.46 | 183 | 1.51 |
| | 7 | Nehru Nagar(Burud Galli) (N) | 43 | 0.007 | 0.29 | 440 | 0.76 | 82 | 0.67 |
| | 8 | Ramanagar Waddarwadi(N), Gangwadi (Waddar colony) (N) | 46 | 0.054 | 2.31 | 3628 | 6.34 | 747 | 6.18 |
| | 9 | Kanabargi Extention(NN) | 57 | 0.014 | 0.59 | 1565 | 2.73 | 392 | 3.24 |
| | | | Total | 0.889 | 37.92 | 19521 | 34.01 | 4260 | 35.13 |
| Road & Railway Side | 1 | Patil Galli,Kasabag(NN) | 20 | 0.044 | 1.88 | 845 | 1.47 | 178 | 1.47 |
| | 2 | Waddar Galli,Khasbag(N) | 21 | 0.063 | 2.69 | 2240 | 3.91 | 410 | 3.39 |
| | 3 | Kunthi nagar Near teachers colony Khasabag(NN) | 22 | 0.008 | 0.34 | 623 | 1.08 | 131 | 1.08 |
| | 4 | Harijan Wada,Kasabag(NN) | 23 | 0.2 | 8.55 | 380 | 0.66 | 79 | 0.65 |
| | 5 | Beldar Chawani(N) | 41 | 0.005 | 0.21 | 332 | 0.58 | 70 | 0.57 |
| | 6 | Shivaji Nagar (NN) | 49 | 0.2 | 8.55 | 1084 | 1.89 | 239 | 2.42 |
| | 7 | Old Gandhi Nagar(NN), Maruti Nagar(NN) Bijapur Road, New Gandhi Nagar(N) | 50 | 0.132 | 5.64 | 10605 | 18.53 | 1951 | 16.14 |
| | 8 | Shrinagar,Jopadpatti(NN) | 51 | 0.03 | 1.28 | 310 | 0.54 | 75 | 0.62 |
| | 9 | Alarwad Ashray colony(NN) | 58 | 0.06 | 2.56 | 576 | 1.0 | 131 | 1.08 |
| | | | Total | 0.742 | 31.7 | 16995 | 29.65 | 3264 | 27.42 |
| Others | 1 | Rohidas Nagar(N) | 3 | 0.005 | 0.21 | 579 | 1.00 | 137 | 1.13 |
| | 2 | Nath pai Nagar(N) | 4 | 0.009 | 0.38 | 1267 | 2.21 | 311 | 2.57 |
| | 3 | Zapat Nagar,Belagavi(N) | 5 | 0.022 | 0.94 | 1793 | 3.13 | 392 | 3.24 |
| | | | Total | 0.036 | 1.53 | 3639 | 6.34 | 840 | 6.94 |

(NN)*:Non-Notified                                        (N)*:                          Notified

## Locational Pattern of Slums

Location of slums in the various urban centers varies from town to town. Slum dwellers prefer to settle in accessible area to save time, energy and money (Bhole,A.S.,et al.2013). Belagavi city is one of the commercial hub in northern part of Karnataka state and is oldest city.  Now a- days, Belagavi city is got place in the list cities where 'Smart city plan' is going to be implemented. The city is developing rapidly; slums are also growing on par with the city growth. In the city, 41% of the slums are in residential area.  In the beginning, these slums were originated in suburban area. Now, with the urban sprawl, these slums are left out at the centre of the city. Today, these slums are in-between the residential area. 21% of the slums are grown up either along roadside or along the railway line. And these slums are having highest slum population compared to other slums.

In the city, most of the population is concentrated along the Road and Railway line. Slums are also found near Market area. 16% of slums are in the market region. These slums are having Pakka and Kaccha houses. Both Notified and Non-notified slums are found in market. As such slums are mainly concentrated near to working places. Slums are also originated near industrial area. This area accounts for 16% of area under slums. These slums are in Private land, but these are not permanent settlements as the dwellers they are migrating from one place to another. within the city. Remaining 6% of slums are spread in the other locations. They are mainly found in suburban region. People of these slums are engaged in construction works (Table. 4 & Fig.4)

## Conclusion

Slums are originating and developing in unhygienic places. Quality of life in the slums is very low as there is scarcity of even basic amenities. The government has to provide them minimum amenities like sanitary, latrines, drainage uncontained water supply, roads and basic facilities through the slum can be improved.  There is a tendency among slum dwellers to settle near work place to save energy, time and money. In the study region slums are mainly located in residential area, Road and Railway side, Market and near Industrial, area. Ward no. 50 has largest slum population. Two thirds of the slums are existed in privately owned land and located either in residential or along road and railway line.

 Nearness to the work place is the dominant factor reflecting location of large slum. High cost of land cost is another important factor which influences the location of slum.  Thus, accessibility to work place and market are the most dominant factors in the location slums in the study area. Amenities in the slums and availability of easy shelter are other factors that determine the location of slums. In the study region, the slum clearance board is working for development of slums. Addition of Belagavi city in the plan of Smart cities has given new lease to slum development programmes and rehabilitation of slums.

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