

# [Space spatial segregation and spatial inequality economics essay](https://assignbuster.com/space-spatial-segregation-and-spatial-inequality-economics-essay/)

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## ABSTRACT

Caste is very much prevalent in all walks of life in India. Ones education, employment, residence, social status and everything is correlated with caste in this country. It is practiced for centuries and still persists. This paper attempts to find out the difference in spatial isolation faced by Scheduled Castes and Scheduled Tribes in India. It reveals the extent to which these two communities are marginalized spatially. The paper also analyses how urbanization is affecting segregation based on caste and how geographical distribution of these two groups changed with time. The study mainly focuses on Karnataka a representative state selected. Key words: Spatial isolation/segregation, Scheduled Tribes and Castes, Dissimilarity Index

## 1. INTRODUCTION: SPACE, SPATIAL SEGREGATION AND SPATIAL INEQUALITY

Tobler’s first law of geography which is the counterpart in social sciences for Newton’s ‘ Law of universal gravitation’ explains " Everything is related to everything else, but near things are more related than distant things", and this is the core of all spatial analysis. This means that geographically nearer units interact more and will have some common characteristics which are different from the rest. This is applicable in case of human population also. Whether we like it or not, it is a fact that we are more in contact with our immediate neighbours than distant people. So there is a strong tendency among people to be geographically closer with people with similar socio-economic characteristics. Segregation is something that we observe everywhere in the world in every levels of society and is practiced from time immemorial. Even in ancient civilizations we can see societies are divided into different strata. In modern days we can see segregation in international political arena to small friendship gangs . Thomas Schelling the Nobel laureate puts it as " People get segregated along many ways. There is segregation by age, income, language, religion, colour, taste, comparative advantage and accidents of historical location. Some segregations arises from practice of organizations, some deliberately organised, some results from the interplay of individual choices that discriminate. Some of it results from specialized communication systems, like different languages. And some segregation are corollary to other modes of segregation, residence is correlated with job location and transport."(Schelling, 1971). We can define spatial segregation as a ‘ phenomenon of restriction of social interactions among people or groups with some characteristics that differentiates them from others so that there is a concentration of homogenous population on a delimited space’. But why we are so much concerned about such segregations? Or how space became a key concept in Social Sciences? It is because almost all social, economic and political issues have it roots in a well defined space. " Everything happens somewhere, which means that all action is embedded in place and may be affected by its placement."(Logan, 2012) . Spatial studies are important because inequalities are often spatial. Where the individuals live can tell us a lot about their life. Poverty, infant mortality, sex ratio, literacy, industrialization and almost all socio-economic inequality can be traced spatially. For example we can see that poverty in India is mainly concentrating in BIMAROU states . Kanbur and Venables says spatial inequality is a reflection of overall inequality and has significance when spatial and regional divisions line up with political and ethnic tension in a region. The negligence that North East states face and the problem arising from that is a clear example for this. Spatial inequalities often arise from spatial isolation. So by studying spatial isolation we are able to understand to what extent one community is marginalized or the extent of inequality prevailing in the society. Park (1925) says " in society we not only live together, but at the same time we live apart and human relations can always be reckoned, with more or less accuracy, in terms of distance….. Social relations are frequently correlated with spatial relations, and hence are in a degree measurable". Social segregation will be reflected as spatial segregation and can be made measurable through spatial analysis. Every person are comfortable to be with people who are similar to them whether it is based on age, language, race or any other factor. But it becomes problematic as there are some positive and negative externalities associated with these segregations and because of this, one cluster will be enjoying the advantages of segregation while others will be suffering. Those who are disadvantaged because of segregation would like to come out of that system but they won’t be able to do that because of diverse problems. In United States and European countries people are spatially segregated along race and socio-economic status. But in India the situation is little different. The caste system which is being practiced for centuries is very significant and cause spatial distribution of different groups. Caste system that is continued for centuries have made people segregated. We can see a pattern with Brahmin population clustering near temples and centres of villages and lower sections segregating in peripheries. The whole village will be divided into different layers based on caste. We can see that religion based segregation is also prominent in India. It is Scheduled Caste and Scheduled Tribes who are extremely affected by caste based segregation in India. But their spatial segregation is different from each other because the roots of this segregation are different, it can be clearly understood from the terms ‘ Scheduled castes and Scheduled Tribes’ itself. One is people having tribal origin and others are earlier untouchables who fall in the lowest section of society according to Varna system prevailed or ‘ still prevailing’. So the former will be isolated in some particular geographical areas like forest, hills, deserts etc and latter will be spread across villages more uniformly but will be isolated and marginalised in each village. This study attempts to find the differences in spatial segregation of SC and ST in India with particular reference to Karnataka.

## 2. REVIEW OF LITERATURE

Scheduled Tribes are often combined with Scheduled Castes in the literature, but they are completely different social groups. The former do not exactingly fall within the caste ladder, and have different cultural and religious practices and social customs. They don’t face exclusion, in the form of untouchability as in case of Scheduled Castes. But when segregation is defined more generally in conditions of being " prevented . . . from entering or participating" or " being considered or accepted", Adivasis are par equal with SCs ". (Das and Kappoor). Scheduled castes are on other hand people falling in the lowest strata according to the Varna system practiced in India based on occupation. Scheduled castes were people who did menial jobs and were considered as untouchables. Tribes became equally marginalized as Scheduled Castes after the advent of British and they were together referred as ‘ depressed classes’. The introduction of private property started with the ‘ Permanent Settlement Act’ of the British in 1793 and promotion of the " Zamindari" system that bestowed control over large territories, including tribal territories, to chosen feudal lords for revenue collection by the British.(Bijoy, 2003). British conferred authority to zamindars to collect rent from the tribes. Tribal people were converted to tenants in the forests where they were living from time immeasurable. They have to pay rent as money; these poor who don’t have money have to borrow it from money lenders. When they were unable to pay, they were forced to become bonded laborers of the zamindars. (Jyothsnaphania). This system continued and situation of tribes became equal with that of dalits and both the communities face severe isolation in all levels in modern India. Desai and Dubey(2011) says that centuries of caste centered social segregation have left an inheritance of discrimination in access to property, education, business ownership and profession. These practices lead to uneven access to productive assets and resulted in material disadvantages. They add that there are two kinds of inequalities arising from this, inequality in opportunity and inequality in outcome. The former includes inequality in attaining land ownership, education and creating positive social networks, latter includes annual earnings wage etc. The study showed there are statistically significant caste disparities. Compared to upper caste people, dalits and adivasis have lesser education level, land holdings, important social connections and household size adjusted consumption expenditure. Their study also showed caste inequality is more prevalent in developed villages and small towns and less in lower developed villages and metro cities. There are many empirical studies which try to explore the extent of segregation of SC and ST in India. A study conducted in Pune shows that residential segregation index shows a U shaped pattern, " There is a graded hierarchy in the extent of residential dissimilarity as one moves up the socioeconomic ladder, and segregation in residence is greatest for the highest and the lowest status groups. Upper caste people are centralized and lower caste people are decentralized in Poona. But this segregation is lower than segregation of Blacks in the United States. (Mehta, 1968, 1969). Another study in Kolkatha city using ACI(Absolute centralisation Index) shows that SC population tends to live evenly throughout the city space but ST population is spatially marginalised.(Mishra, 2012). Saha in his study on Koch Bihar district, found that the proportion of schedule caste and scheduled tribe population is unevenly distributed in the urban areas of the district. Though the proportion of schedule tribe population is negligible, they are mainly concentrating on two muncipal towns (Haldibary and Mekhliganj).(Saha, 2012). Vithayathil and Singh showed that in seven metropolitan cities of India the residential segregation by caste is much higher than that of residential segregation by socioeconomic status. Caste segregation is highest in Kolkatha and lowest in Hyderabad.(Vithyathil and Singh, 2012). They also conducted a study on seven major cities of Kerala to analyze whether history of strong social movements have reduced spatial segregation in the state and how it changes with the size of cities. The study showed that segregation by caste is low in large cities( Thiruvanathapuram and Kochi) and higher in small cities (Palakkad and Alappuzha). (Vithayathil and Singh, 2013). Comparing this two studies we can see segregation index of metropolitan cities range from 0. 19-0. 36 and that of cities in Kerala is 0. 23-0. 41. Similar segregation index of Kerala cities with that of metro-cities shows that social movements can reduce caste based segregation even without much urbanisation. A study in Maharashtra identifies there is a core and peripheries for major tribal groups. The cores of the 5 major tribal groups are identified in the north-eastern and north-western parts of the state. The study shows tribes are isolated in north-eastern and north-western interior districts of Maharashtra and we know that these districts stand far below in terms of development when compared with Mumbai or other coastal districts. The author also says " process of globalization as witnessed from the maps shows that they are being squeezed into smaller territories".(Ramothra et al, 2011)Saikia et al also stress on the same issue " The tribal groups who were in any case distributed in geographically negative areas were further squeezed into more inhospitable tracts or had to move out to newly emerging towns to work there in the unorganized tertiary sector of the economy." Evidences of redistribution of tribal population are spatially contained in the fragmented cores and peripheries of many tribal groups living in central India.(Saikia et al, 2012). From literature we can understand that ST population cluster in some geographical regions like hills, desert, forests etc and SC population are spread more uniformly when we consider large geographical units, but when we do small village or town level analysis they show segregation. We can also understand that segregation based on caste will reduce by urbanization.

## 3. DATA AND METHODOLOGY

2001 census data is used for this analysis. Karnataka and Andhra Pradesh which have SC and ST percentage of population closer to all India average are taken for preliminary examination. Later the study concentrates on Karnataka which show less segregation. As a preliminary analysis district wise percentage of population of SC and ST is plotted on a map to analyse the concentration across the districts. Then in next stage ‘ Index of Dissimilarity’ of SC and ST in selected districts are calculated and compared to check whether one section is more segregated than other. By this we are also able to quantify the level of segregation of SC and ST across the districts. Index of dissimilarity (SC and ST combined) of selected districts are found and compared with the percentage of their population in the district. This is done to analyze whether an increase in percentage of population of SC and ST in a district result less segregation. It is to be noted that unlike in other studies Dissimilarity Index is not found at a ward level, but at village level, it can be interpreted as percentage of SC/ST population should be shifted from one village to another to get an even distribution. Ward level analysis will definitely give higher DI than this, as there is higher segregation of SC and ST within each village. This can be underlined by the analysis based on some villages in Mysore district. Six nearby villages are selected and percentage of population of SC and ST is calculated in the wards and plotted on map to show the segregation faced by them. This selected districts dissimilarity index is compared with rate of urbanization to check whether urbanization reduces spatial isolation. 1971 and 2001 data is compared to check whether segregation decreased over time Location Quotient is used, so that it will take care of differential growth rates of SC/ST population and general population in the state. For comparison 2001 data is adjusted with 1971 data, i. e. population of some newly formed districts were are added up to get corresponding population data of old districts in 2001.(List of new districts: Appendix list1)Dissimilarity Index developed by Duncan and Duncan (1955) is used for the analysis and can be calculated asWhere Si= population of concerned group in smaller unit(village)S= population of concerned group in larger unit (district)Ui= population of others in smaller unit (village)U= population of others in larger unit(district)The value can range from 0-1. Index multiplied by hundred is the percentage of population that should be shifted from one smaller unit to other to get an even distribution across the larger unit. Here the smaller unit is villages and larger unit is districts. Location Quotient can be calculated asThe value will be 1 if district have equal concentration as the state. It will be more than one concerned district have a larger concentration of concerned population than in the state. It will be less than one if the concentration is less than 1.

## 4. ANALYSIS AND RESULTS

The analysis of pattern of distribution shows in India ST is concentrated in the geographically disadvantaged northern mountainous regions of Himalayas and central Deccan plateau and SC is concentrated on rest of India. Tribal people are found in isolated villages and those regions are one of the most disadvantageous regions in India. Estimates say that 15% of India’s land area is tribal villages. There is a very high concentration of Tribes in Kashmir and NER and we know these regions are geographically and hence socially segregated from rest of India. Figure. 1Figure. 2Source: Report Of The Task Group On Development Of Scheduled Castes And ScheduleTribesBut this information is not sufficient to understand the difference in spatial isolation faced by these two groups. So we move on to take two states Andhra Pradesh and Karnataka, which have SC and ST population closer to national level.(Table 1 : Appendix). District wise percentage of SC and ST in each district is calculated and plotted on the map, which given below.

## Figure. 3 PATTERN OF DISTRIBUTION OF SC IN KARNATAKA AND ANDHRA PRADESH

## Figure. 4 PATTERN OF DISTRIBUTION OF ST IN KARNATAKA AND ANDHRA PRADESH

SC population is more or less evenly distributed in the states, most of the districts fall in 10% to 20% level and in Karnataka we can see the concentration of SC increases as we move to interior districts. For ST population there is a strong tendency for clustering. Majority of ST population in Karnataka lives in the most interior districts. It is clear that SC population is more evenly distributed in both the states than ST population. This is confirmed by finding Index of Dissimilarity of both the states. Table 1. Dissimilarity Index of SC and ST in Karnataka and Andhra Pradesh

## STATE

## DI FOR SC

## DI FOR ST

## KARNATAKA

## 0. 16

## 0. 33

## ANDHRA PRADESH

## 0. 11

## 0. 50

This means that 16 % and 11 % of SC persons should be relocated from one district to other to get an even distribution in Karnataka and Andhra Pradesh respectively and it is 33% and 50% in the case of ST. Andhra Pradesh’s DI is very high for ST population, so it may become a biased sample, because of this for further analysis Karnataka is selected as a representative state. http://www. birding. in/images/Maps/BirdMap. jpgComparing this figure with maps showing distribution of SC and ST we can make some interesting conclusions. Spatial isolation of ST is clearly visible at a state level analysis itself. They are pushed towards a particular geographical area in the state, like forest, deserts, hills etc . Here in these two states it is at the edges of Deccan plateau which is rain shadow regions. Karnataka the region is called northern Bayaluseeme which comprises hillocks covered by Deccan thorn scrub forests

## 4. 1 COMPARING SC AND ST SEGREGATION ACROSS SELECTED DISTRICTS USING INDEX OF DISSIMILARITY

Districts are selected in such a way that we get districts with low, medium and high SC and ST concentration and are distributed more or less evenly across the state. Table 2: Dissimilarity Index of selected districts in Karnataka

## DISTRICT

## DI of SC

## DI2 of ST

## DI of ST+SC

Dharward0. 090. 130. 09Uduppi0. 160. 260. 41Bangalore0. 070. 080. 07Gadak0. 200. 220. 18Mysore0. 170. 320. 20Tumkur0. 180. 420. 25Raichur0. 140. 280. 19Bidar0. 150. 240. 16Gulbarga0. 160. 440. 17Chamarajanagar0. 200. 360. 19One can see that dissimilarity index for ST is very much higher than that of SC in all the districts. That means ST are more spatially segregated and cluster in some villages. Table 3: Percentage of SC and ST to total population and dissimilarity index

## DISTRICT

## Percentage of SC and ST

## DI of ST+SC

## Uduppi

## 10. 90%

## 0. 41

## Bangalore

## 16. 73%

## 0. 07

## Dharward

## 19. 69%

## 0. 09

## Gadak

## 19. 74%

## 0. 18

## Tumkur

## 25. 84%

## 0. 25

## Gulbarga

## 38. 59%

## 0. 17

## Mysore

## 38. 85%

## 0. 20

## Bidar

## 47. 10%

## 0. 16

## Chamarajanagar

## 55. 29%

## 0. 19

## Raichur

## 59. 11%

## 0. 19

We expect that when population percentage of a section increases in one district their segregation will come down. But here even if the percentage of SC and ST is very high DI is not decreasing proportionately. This shows even in districts where SC and ST are majority(Raichur and Chamarajanagar) they are segregated and cluster in some villages. But we don’t know how they are spatially distributed, for this we should do a village level analysis. Mysore district with medium SC and ST population and comparatively lower dissimilarity index is selected for village level analysis. Villages selected are Bettadathunga, Bhuvahalli, Ravandur, Ramanathathunga, Hithnehebbagilu and Doddabyalalu. When we plot wards with high SC and ST population we understood that their population concentrate on the periphery of the villages. Wards where SC and ST population concentrate in different villages come closer and show some clustering. Table 4: Percentage of SC and ST in wards of selected villages in Mysore

## Village

## SC %

## ST%

## Village

## SC%

## ST%3

## Village

## SC%5

## ST%6

## BETTADATHUNGA

## HITNEHEBBAGILU

## DoddaVadarakere

## 0%

## 0%

## Naganahalli

## 75. 62%

## 0. 00%

## Billahalli

## 0. 000%

## 0. 000%

## Chikkavaddarakere

## 3. 93%

## 0. 00%

## Hiremalali

## 0. 00%

## 0. 00%

## Aithanahalli

## 18. 687%

## 12. 355%

## BHUVANAHALLI

## Chikkamalali

## 1. 77%

## 32. 58%

## Seeguru

## 40. 416%

## 5. 081%

## Kurgallu

## 34. 25%

## 18. 63%

## Bettada

## 0. 00%

## 0. 00%

## Hitnahalli

## 1. 637%

## 0. 000%

## Konasur

## 21. 48%

## 5. 44%

## Bettadakaval

## 0. 00%

## 0. 00%

## Manchedevanahalli

## 0. 000%

## 0. 000%

## Joganahalli

## 19. 32%

## 8. 52%

## Barse

## 20. 82%

## 0. 00%

## Hitnehebbagilu

## 9. 376%

## 1. 619%

## Bhuvanahalli

## 7. 87%

## 0. 00%

## Kudakuru

## 23. 14%

## 13. 58%

## Avarekaiguddadakaval

## 39. 437%

## 0. 000%

## Bekkare

## 19. 80%

## 0. 00%

## Nandipura

## 39. 37%

## 0. 00%

## Mellahalli

## 30. 382%

## 13. 740%

## Eachuru

## 5. 79%

## 0. 00%

## RAVANDUR

## Haravemallarajapatna

## 16. 100%

## 9. 010%

## DODDABYALALU

## N. Settihalli

## 8. 86%

## 7. 89%

## RAMANATHA THUNGA

## Arenahalli

## 4. 45%

## 0. 00%

## Nilangala

## 18. 61%

## 0. 00%

## Dorekere

## 23. 931%

## 0. 000%

## Kalkere

## 3. 78%

## 50. 28%

## Kelaganahalli

## 10. 43%

## 5. 86%

## R. Thunga

## 7. 822%

## 21. 151%

## Doddabyalalu

## 17. 90%

## 0. 13%

## Bhavalalu

## 46. 79%

## 0. 00%

## Sundavalu

## 22. 503%

## 0. 000%

## Javanikuppe

## 0. 70%

## 0. 00%

## Ravandur

## 20. 93%

## 7. 45%

## Aswalu

## 13. 757%

## 7. 196%

## Makanahalli

## 76. 30%

## 0. 00%

## Haralahalli

## 38. 16%

## 0. 00%

## Sanyasipura

## 27. 516%

## 28. 616%

## Chikkabyalalu

## 30. 36%

## 0. 00%

## Bhoganahalli

## 6. 46%

## 2. 68%

## Kaggundi

## 1. 090%

## 0. 000%

## Basalapura

## 11. 56%

## 3. 99%

## FIGURE 5. DISTRIBUTION OF SC AND ST IN SELECTED 6 VILLAGES OF MYSORE

Now we move on to check whether urbanization reduces spatial isolation. The selected districts urbanization rate is compared with its dissimilarity index

## Figure6. URBANIZATION AND SEGREGATION

Source: Urban Development Policy, Government of Karnataka, 2009We can see that districts with higher urbanization show lesser segregation on cast lines. This does not mean there is no segregation, but segregation on caste lines will be decreasing but based on occupation, class etc will be rising. There is also a chance of pushing the disadvantaged group outside the city premises. Tendency marginalized people to sell their land for high price and to migrate to interior region is very much prevalent. Less SC and ST concentration in Bangalore urban compared with Bangalore rural provides some light in this direction. Now let’s check whether some changes occurred in their concentration across districts from 1971 and 2001.

## Table 5. CHANGES OCCURRED OVER TIME: COMPARING CONCENTRATION OF SC AND ST POPULATION BY 1971 AND 2001 CENSUS

## State/District

## SC% 1971

## SC%2001

## L. Q1971

## L. Q. 2001

## North Canara

## 4. 106

## 7. 53

## 0. 31

## 0. 46

## South kanara

## 5. 140

## 6. 61

## 0. 39

## 0. 41

## Dharwar

## 7. 956

## 14. 23

## 0. 61

## 0. 88

## Belgaum

## 9. 200

## 10. 96

## 0. 70

## 0. 68

## coorg

## 9. 773

## 12. 29

## 0. 74

## 0. 76

## Bijapur

## 10. 073

## 16. 91

## 0. 77

## 1. 04

## Raichur

## 10. 760

## 17. 53

## 0. 82

## 1. 08

## Mandya

## 12. 252

## 14. 02

## 0. 93

## 0. 87

## Shimoga

## 14. 250

## 16. 41

## 1. 08

## 1. 01

## Bellary

## 14. 909

## 18. 46

## 1. 13

## 1. 14

## Bangalore

## 15. 024

## 14. 60

## 1. 14

## 0. 90

## Bidar

## 15. 043

## 19. 89

## 1. 14

## 1. 23

## Gulbarga

## 15. 060

## 22. 92

## 1. 15

## 1. 41

## Hassan

## 15. 384

## 18. 11

## 1. 17

## 1. 12

## Chikmangalur

## 16. 254

## 20. 43

## 1. 24

## 1. 26

## Tumkur

## 16. 458

## 18. 34

## 1. 25

## 1. 13

## Mysore

## 17. 161

## 19. 56

## 1. 31

## 1. 21

## Chithradurga

## 18. 195

## 20. 24

## 1. 38

## 1. 25

## Kolar

## 23. 940

## 26. 49

## 1. 82

## 1. 63

## Karnataka

## 13. 140

## 16. 20

Location Quotient of SC is almost same in both periods. Only slight variations can be observed, so we can conclude that concentration of SC population have more or less remained the same in both the periods. Except some districts like Gulbarga, Kolar(which have high LQ), North Canara and South Canara(which have low LQ) all other values are closer to 1. So we can say there is no abnormal clustering of SC population across districts in both the time periods. Kolar showing very high L. Q of 1. 82 also has come down in 2001. Distribution is becoming more even.

## Table 6. Location Quotient of SC and ST in districts of Karnataka

## State/District

## ST% 1971

## ST%2001

## L. Q1971

## L. Q. 2001

Chithradurga0. 05514. 38

## 0. 07

## 2. 19

Raichur0. 08115. 41

## 0. 10

## 2. 35

Bidar0. 08512. 13

## 0. 11

## 1. 85

Gulbarga0. 1084. 92

## 0. 14

## 0. 75

Kolar0. 1278. 11

## 0. 16

## 1. 24

Tumkur0. 1287. 50

## 0. 16

## 1. 14

Hassan0. 1461. 540. 180. 23Mandya0. 2420. 970. 310. 15North Canara0. 2561. 760. 320. 27Bangalore0. 3061. 750. 390. 27Bijapur0. 3293. 190. 420. 49Bellary0. 37817. 99

## 0. 48

## 2. 74

Shimoga0. 5793. 410. 730. 52Dharwar0. 62510. 03

## 0. 79

## 1. 53

Mysore0. 94110. 47

## 1. 19

## 1. 60

Chikmangalur1. 3703. 601. 740. 55Belgaum2. 1935. 782. 780. 88South kanara3. 2793. 474. 150. 53Coorg7. 0318. 418. 911. 28Karnataka0. 7896. 55Table shows that in 1971 many of the coastal and other southern districts like South Canara, Coorg, Belgaum, Chickmangalur, Shimoga is having higher ST concentration. But by 2001 this scenario is entirely changed. Now ST population is concentrated in north and interior districts. Figure 7. PATTERN OF ST POPULATION CONCENTRATION IN 1971 AND 2001The reason behind this shift is not at all clear. It is irrational to think there is mass displacement of ST population is happening from coastal districts to interior districts. But Bijoy(2003) says In the prosperous mineral belt of Jharkhand, the ST population has go down from around 60% in 1911 to 27. 67% in 1991 he also says the sharp raise of Scheduled Tribe population in Maharashtra in actual terms by 148% in the twenty years since 1971 is mainly due to dubious inclusion, for political motives, of a number of economically superior communities among the backwards ST groups. Another possible reason is that there is migration of affluent people to developed coastal districts from rural interior districts, and this may be resulting in lowering ST percentage in such districts even though their absolute population is rising.

## 5. CONCLUSION

Segregation is common phenomenon in the world. People segregate along many lines such as economic status, religion, caste, occupation, race, language, age, etc. It is human psychology that everyone is interested to be in contact with people having similar characteristics and it is very difficult to control such actions. By studying the spatial segregation one can understand the extent to which a community dominate or is marginalised in the society. Segregation is problematic because some communities benefit from positive neighbourhood effect, but at the same time some other communities become more vulnerable to exclusion and socio-economic inequality. Spatial segregation is often correlated with spatial inequality. Some spatially isolated communities will be suffering from high incidence of poverty, low health status, low level of education etc. Their standard of living will be much lower when compared to other clusters. Spatial segregation is proxy for social segregation of different communities. Some segregation occurs due to historical reasons. Caste is one among them. Segregation based on cast is a continuation of caste based exploitation that is practiced in India and several other South Asian countries. In Indian villages caste ties are still very strong. Even though some people manage to come out of this system, for majority of people it is the caste that decides their education, occupation and other aspects of social and economic life. Scheduled Tribes and Scheduled Castes are the most disadvantaged communities in India. In our analysis we found that Scheduled Caste and Scheduled tribes face severe spatial isolation . Scheduled Tribes are spatially isolated in some geographically disadvantaged regions of India. We saw they concentrate on less fertile Deccan and Himalayan region. In Karnataka and Andhra Pradesh they are mostly found in the edges of Deccan plateau which are rain shadow regions. Later in our analysis we found that SC is evenly distributed across districts in both the states. Within district also ST population shows more segregation than SC population, and an increase in SC and ST population does not guarantee that they will be more uniformly distributed. In village level analysis, it became clear that these groups are extremely marginalised and concentrates on some wards in the periphery of villages and these wards in adjacent villages come closer to each other. The study also shows there is negative relationship between urbanization and segregation based on caste. This doesn’t mean that there is no segregation in urban centres. Class based segregation will become more prominent and caste ties break with urbanization. Even though from analysis it is not clear, one should doubt whether urbanization causes a displacement of backward class/caste from metro centres to suburban villages. The reasons for lower SC/ST population in Bangalore urban compared to Bangalore rural has to be studied more deeply to understand this. We also saw that while SC concentration remains almost stable from 1971-2001 and distribution is becoming more even ST concentration shifts from coastal districts to interior districts. In-depth analysis is needed to find the actual reasons for this shift, but it is almost sure that it is not because of a massive displacement. Why this system still persists is a very serious question. For scheduled castes or scheduled tribes to come out of the situation they face today they should have certain capabilities, for example better education, income, land holding etc. But we can see that they are mainly casual or agricultural labourers who don’t earn much. They don’t have income to attain higher education, or to migrate and settle down in better places. One can also notice in India caste system is so strong so that people are not even willing to sell their land to people from other caste. In case of ST they are segregated in geographically disadvantaged places which lack proper infrastructure facilities. Industries are not coming up in these regions. When agricultural land fall along with less development in industry these people will become more distressed. If changes should take place and integrated development should happen, along with deterioration in caste ties, these people should be given more opportunities to get higher education , better employment etc. Even though government is providing caste based reservation for decades their situation has not improved to a great extent. APPENDIXTable 1Source: Report Of The Task Group On Development Of Scheduled Castes And ScheduleTribes

## LIST 1 : DISTRICTS FORMED AFTER 1971

## (Shown in such a way that new districts add up to form old districts)

Chamarajanagar + Mysore = MysoreUduppi + Dakshina kannada= South CanaraBangalore Urban + Bangalore Rural= BangaloreHaveri+ Gadag+ Dharward = DharwardBagalkot+ Bijapur = BijapurRaichur+ Koppal = RaichurDevanagere + Chithradurga = Chithradurga

## PICTURE 1 : POLITICAL MAP OF KARNATAKA(2001)

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