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Lecture No. # 22 Urbanization in India

Well friends, so we are discussing issues regarding migration and urbanization, in that there will be three lectures devoted to urbanization. And in the last lecture, what I did? I just introduced the concept of urbanization, I defined the concept of urban and rural, and in general and using census of India definition in particular. And then I also showed how sociologist like Kinsley Davis or Ariga, they have measured urbanization, in a simple term, it was defined as percentage urban or what percentage, what proportion of population is living in urban areas.

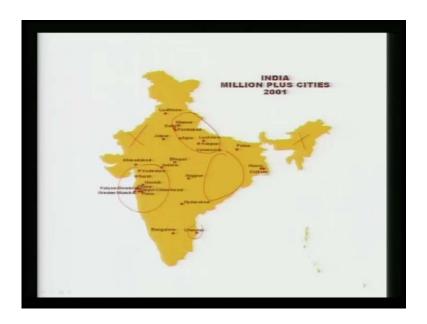
But since all the urban areas, do not have the same concentration of population, so it becomes important to attach a higher weight to populations of larger cities or bigger town; and therefore Kingsley Davis develops a different index of urbanization, in which he adds population of cities or localities or towns of such certain size and above. This way, he is able to give more way to populations of larger cities and towns.

Similar was the concept of Ariga, so these definitional issues, we have already covered, I have also given you, the concept of speed of urbanization. Then I said that assuming that the rate difference, in the rate of growth of urban and rural population remains constant, it is possible to show that percentage urban follows a logistic growth model. So, United Nations developed a manual called manualate to project population of urban areas and population of cities, using logistic growth model and they made certain tables of that.

This happened, when I was a student of population; when I was doing my diploma, in IIPS, that time this UN manualate had come. And we were so excited, today these things will look very simple to you, but we were so excited that we have projected population of urban and rural areas of districts of Maharashtra; and population of cities of Maharashtra, which were subsequently used by government of Maharashtra, and two papers were published on the basis of calculations of cities and urban populations, using this simple logistic growth model of United Nations.

Now, today we will talk something specifically about India. Though today, again there will be some conceptual discussion, regarding rank-size-rule and primacy, but I will try to give more information about India, because we as student of population and society in India must know about Indian situation.

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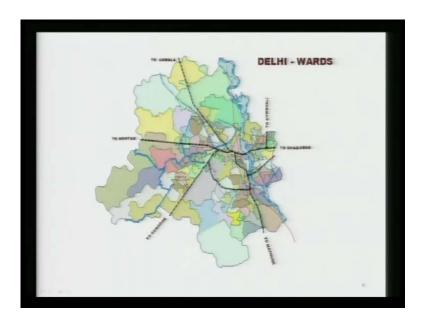


So, let us look at some census maps of India. I thought that I can begin with some census map; these maps are given on the website of register general India to see some aspects of urbanization. The first map shows, the distribution of million plus cities in India on the basis of 2001 census. Million plus means, million is 10 lakhs. These are the cities, which have the population of 10lakhs or more, and do you not see, that the cities in India are highly concentrated in certain parts of the country. So, there is concentration around, Bombay, Pune, Thane, you know this regions. There are big cities like, Chennai, Bangalore is a big city and Hyderabad they are quite dispose, there is a concentration of urban population or large cities, in this part of the country and you find that, there is no large city, here in western India, there is no large cities of population 10 lakhs and above, in the 7, so called, north eastern sisters.

There are no large cities, in this area, actually, why certain areas of India, only have large cities, to explain that, we have to go into history of urbanization of India. The urbanization, initially, before the British people came, to major source or influence of urbanization, were religious and political. So, you had either religious cities or religious

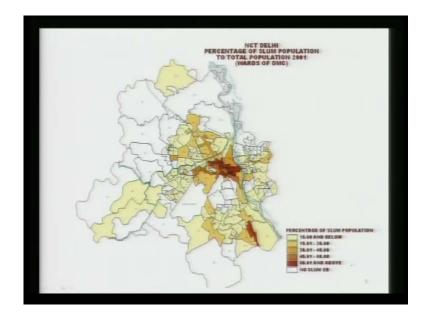
towns like Varanasi, Allahabad, Puri, or there were cities, which were sort of capital, the ruling dynasties of that time. But gradually during the British period, the nature of urbanization changed and urbanization became more connected with development and rise of poor cities, which were used by colonial powers for the exploitation of hinterland of India. You know, this also means, that the urbanization in India, were shaped during last 200 years, during British rule and after independence by sort of colonial policies and thereafter. So, there is much better infrastructure or much better connection between cities, rather than between cities and rural areas, these are all interrelated issues.

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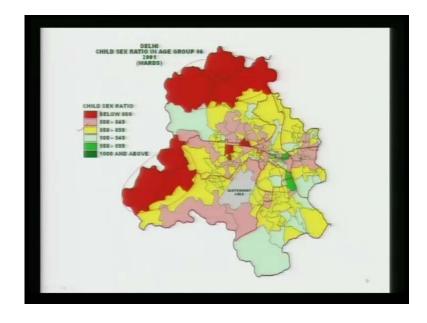
Let us just quickly, look at some map. This is a map of wards of Delhi and you can see that Delhi, which was originally situated, along this river Yamuna, is gradually spreading in all directions and more towards Haryana and Punjab side and not so much towards Uttar Pradesh, because towards Uttar Pradesh, you have another city Ghaziabad, and its possible, that the new expressway of Delhi, will expand more in this direction, it is possible.

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And this is a map of slums, interesting you can see that slums have concentration in certain areas of cities, this dark area shows, that, this part of Delhi, where more than 60 percent population, lives in slums and this yellow color and white color, show that the concentration of slum population is less. So, there are certain areas, in which slums are concentrated and not the whole part of Delhi, which means, there is a close connection between socioeconomic condition, and morphology of city.

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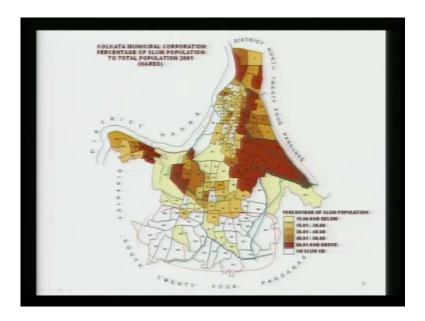
You know, this is another map, I found it quite interesting, which shows, how child sex ratio, defers from one ward of Delhi to another and this, dark red areas, are the areas where child sex ratio or juvenile sex ratio, which means females to males ratio, in age group 0 to 6 is below 100. These are the areas, where we can assume, that cases of sex determination and female feticide are more. There is no area in Delhi where sex ratio is above 1000, however, there is some small area here and there, where sex ratio is reasonably good 950 to 999. Much of Delhi comes under this zone, where sex ratio is between 850 and 899.

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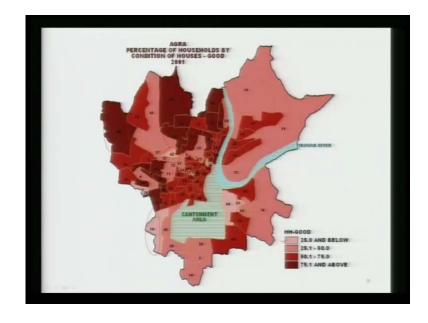
This is, another map of Kolkata Municipal Corporation and its wards, you just have a glimpse of the geography of Calcutta or Kolkata.

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These shows, the percentage of slum population in Kolkata and you find that, again, it is a definite area; concentrated 60 percent or more people in these areas live in slums. And this white area, most of this, is the recent extension of Kolkata, that either does not have slums or the percentage of slums is very low about 15 percent or below. So, that again shows, how socioeconomic conditions and city morphology are correlated, and one needs to explain, why slums are concentrated in certain pockets of city.

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This is another map of Agra and these shows the percentage of households by condition of houses, which are good and bad. Dark color shows, that the houses are in good condition, and lighter color shows, that the houses are in bad condition or like here, it shows, that the percentage of households which are good, as defined by census definition of goodness of household, based on amenities, is between 0 and 25 percent.

And these are the areas, where you find that, the percentage of good houses is less than 0 to 25 and there are some big areas, where percentage of household is in good condition of 75 percent or above. Usually, the custom is not to show the details of socioeconomic or demographic condition for cantonment areas, so about the cantonment area we have no information, and this is the Yamuna river, interestingly all good households, are on one side of the Yamuna river, toward this side and in the upper part means toward the northern part of Agra

So, these maps are only illustrative, and I am using these maps to convey that there is an uneven distribution of urban population in the country for historical socioeconomic and developmental reasons urban population of the country is not evenly distributed in all states or all regions. Secondly, that there are historical reasons behind this. Thirdly, that the quality of life is connected with the city morphology.

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Maps show that

- There is uneven distribution of urban population in the country
- · There are historical reasons behind this
- Quality of life is connected with the city morphology
- Composition of population is also connected with the city morphology
- There is greater concentration of slums at the heart of the city

So, the quality of life is not equally distributed across all wards of the city whether Delhi or Agra or Calcutta, any other city where the composition of population is also connected

with the city morphology and there is a greater concentration of slums, usually at the heart of the old city.

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Table 7.1 shows the levels and trends of urbanization in India in the twentieth century. It shows that in the beginning of the last century only 10.84 percent population of India was living in urban areas. There is no doubt that there were some world famous religious, and political and educational cities in all parts of the country but an overwhelming majority of population was living in rural areas. Thus India lived in its villages. Till 1931 the speed of urbanization was rather small. As a matter of fact during 1901 to 1911 the level of urbanization decreased. The major improvement in urbanization took place during 1931-1951 and 1971 to 1981. The period 1931-1951 was politically turbulent and millions of people moved cross-border after the partition of the county into India and Pakistan. After that the speed of urbanization has been slower and erratic (partly due to definitional changes). The last census (in 2001) showed that 27.81 percent of India's population was living in urban areas and the speed of urbanization is 0.82 percent per year.

When we are discussing about urbanization in India obviously, the first question, which will come to your mind is, what percentage of urban in India, and how this percentage urban has changed over the time?

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Year	Total	Rural	Urban	Level of urbanization	Speed (trend of urbanization
1901	238,396,327	212,544,454	25,851,873	10.84	
1911	252,093,390	226,151,757	25,941,633	10.29	-0.51
1921	251,321,213	223,235,043	28,086,170	11.18	0.86
1931	278,977,238	245,521,249	33,455,989	11.99	0:72
1941	318,660,580	274,507,283	44,153,297	13.86	1.56
1951	361,088,090	298,644,381	62,443,709	17.29	2.47
1961	439,234,771	360,298,168	78,936,603	17.97	0.39
1971	548,159,652	439,045,675	109,113,977	19.91	1.08
1981	683,329,097	523,866,550	159,462,547	23.34	1.72
1991	846,302,688	628,691,676	217,611,012	25.71	1.02
2001	1,028,737,436	742,490,639	286,119,689	27.81	0.82

So let us look at this table first, this is the data from Indian censuses. They show levels and trend in urbanization in India from 1901 to 2001. In the beginning of the last century

in 1901 only 10.8 percent of the population of India was living in urban areas. As I said last time that each figures over the censuses. These figures are not exactly comparative because, the definition of census has changed several times. Yet, much because of the urban population is concentrated in very large cities and they are unaffected by definition changes.

So the effect of change of definition is rather small and you can broadly compare, with what is happening to level of urbanization. The level of urbanization was 10.8 in 1901 and it declined in 1911 it was only 10.29. Then it increase to 11.18 then 11.99 like this up to 1951. The first census after independence, our level of urbanization remained below 18 percent. There is not much change between 1951 and 1961. This is unusual period effected by partition of the country, beginning of five year plan stock taking. We are not sure even whether quality of data is comparable between 1941 and 1951. The 1941 census analysis was heavily affected by conditions of Second World War and quit India.

And after that you find the urbanization level is increasing. The last census in 2001 gave us a figure of 27.81 exactly that means out of 100 people in India 27.81 people who are living in those localities, which have been classified as urban, which means the seats of local administration and if not, then their size of population is above 5000. The 75 percent of the male labor force of them is engage in non agricultural activities and the density of population is 400 per square kilometer.

If you calculate the speed of urbanization, then you find that there is an erratic change. Sometime speed of urbanization increases, sometime it decreases. Except 1901 to 1911 the speed of urbanization is always positive, because the level is constantly rising. The highest speed before independence is for the period 1931 to 1941 where the speed of urbanization was 1.56 percent per year. After independence 1951 census gave us a figure of 2.47 for speed of urbanization and then it declined to 0.39 in 1961. One can argue that the government policies of five year plan, development planning they are closely connected with the levels and speeds of urbanization and one can look for the causes of sluggish growth in urbanization between 51 to 61.

Many economists maintain that, the first five year plan and second five year plan were quite responsible for this. That in 1961 we have only 0.39 as speed of urbanization then

During the preceding census decade 1991 to 2001 the speed of organization was only 0.82 percent per year. You can draw this conclusion that the major improvement in urbanization took place during 1931 to 1951 and 1971 to 1981 the period 1931 to 1951. There was politically turbulent and millions of people moved across border after the partition of the country into India and Pakistan. After that, the speed of urbanization has been slower and erratic. The last census showed that 27.8 percent of India's population was living in urban areas.

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Census data have also shown that Goa State has the highest proportion of urban population (49.76 percent), Himachal Pradesh has the lowest (9.30 percent). Among the Union territories Delhi has the highest proportion of urban population (93.18), and Dadra & Nagar Haveli the lowest (22.89).

The towns and cities are usually divided into five classes:

- Class I Cities with population above 100,000;

- Class II Towns with population 50,000-100,000;

- Class IV Towns with population 20,000-50,000;

- Class IV Towns with population 10,000-20,000; and

- Class V Towns with population 5,000-10,000.

More than half of India's urban population lives in Class I cities, and nearly one third in Class II or Class III towns. The share of towns with population less than 20,000 is rather small (Registrar General India, 2009).

It is customary to divide urban localities into a number of classes on the basis of population class 1, 2, 3, 4 and 5. Class one consist of cities with population above 100000. Class two includes towns with population between 50000 and 100000. Class three towns with population 20000 to 15000. Class four 10000 to 20000 and class five towns with population 5000 to 10000. If you compare states, then you find the state of Goa has the highest proportion of urban population in India. Nearly half of Goa's population is living in urban area. And the lowest level of urbanization is found in Himachal Pradesh, which had only 9.3 percent urban. Among the union territories, Delhi has the highest proportion of urban population that goes without saying, we do not have to consult census, anybody would say that Delhi is largely urban.

But what is interesting after seeing these figures, students of sociology must, know if you are not from Delhi you may not be familiar with this. Delhi also includes 7 percent rural population, so whole of Delhi is not urban. In Delhi state also, there is some population which is classified as rural and about 7 percent population of Delhi consist of rural.

Then Dadra and Nagarhaveliah, they also have low level of urbanization 22.89. So that way there are regional variation and the first map, which I showed regarding distribution of cities in India makes very evident. Yes the cities are concentrated in certain part. There are many other large part of the country, where cities or even medium size towns are missing. More than half of India's population lives in class one cities that is why the definitional changes do not affect the level of urbanization much, though they do a little bit. Nearly one-third in class two or class three towns share with population is less than 20000 is rather small.

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Three Million Plus Cities

- There are about 4,000 cities and towns in India.
- About 300 cities have population over 1,00,000.
- Among them seven cities have population more than 3 million (Indiamart.com, 2009).
- According to U.S. Census Bureau Mumbai ranks third in the world after Tokyo and Mexico. Kolkata 9th and Delhi 14th.
- The names and populations of 3 million plus cities are given in Table 7.2.

You may also like to know something about large cities of India. There are some cities which are called three million plus cities, there are about 4000 cities in India. And by definition cities in urban locality with population 100000 or more are among these 4000 cities. There are 4000 cities and towns in India which includes urban areas of all classes class one, two, three, four and among these 4000 cities and towns means all urban areas. It is better to say urban areas rather than cities and towns, they cover all the urban areas

among 4000 urban areas in India. There are 300 cities, which have population 100000 or more they are called class one cities, so there are 300 class one cities in India.

Among them, there are 7 cities, which have population more than 3 million means more than 30 lakhs. So the total number of urban localities in the country is 4000. Among them class one cities are 300 in number and among these class one cities there are 7 cities which have a population of 30 lakhs and above. According to US Census Bureau Mumbai ranks third in the world after Tokyo and Mexico. Tokyo is the largest city of the world, Mexico follows and after that comes Mumbai, Calcutta ranks 9th and Delhi 14th. So we have two cities, two large cities in the country which are part of the top 10 cities in the demographic sense of population.

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City	Population in	Population is
City	1991	2001
Greater Mumbai (Bombay)	9,925,891	11,914,398
Delhi	7,206,704	9,817,439
Kolkata (Calcutta)	4,399,819	4,580,544
Bangalore	2,660,088	4,292,223
Chennai (Madras)	3,841,396	4,216,268
Ahmedabad	2,876,710	3,515,361
Hyderabad	2.964,638	3,449,878

The populations of these three million cities are given in a table 7.2 greater Mumbai Delhi, Kolkata, Bangalore, Chennai, Ahmadabad and Hyderabad. There is a big difference between them, greater Mumbai is three times the size of Hyderabad. The Hyderabad and Ahmadabad are closer and Delhi with nine point, eight is almost approaching greater Mumbai. Its possible that, after sometime in a few decades Delhi may become larger than Mumbai.

The cities like Mumbai may not grow much in the future. The 2011 census will tell us whether our expectation that, rural to urban migration or rural to large city migration has stopped due to one favorable condition in urban areas on the negative side and due to

implementation of Mahatma Gandhi National Rural Employment Act in rural areas on the positive side. But Delhi is attracting migrants from all sides. Kolkata some people say that, Kolkata is a dying city and the growth potential of Kolkata is not so much.

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City primacy The cities with three million plus population draw our attention to the concept of city primacy According to this concept the share of the largest city is usually larger than that expected under the theoretical law The law is: the product of a city's rank and its size tended to be constant. This law is called the rank-size-rule.

So it is Delhi now, which is growing quite fast, being a capital city. It is Secular city, providing lots of job opportunities in or around Delhi in NCR region, in Haryana, in UP and Punjab, connected with the issue of population size of cities, in the concept of city primacy. The cities with three million plus population draw our attention to the concept of city primacy. According to this concept the share of largest cities is usually larger than expected under the theoretical law. What is that law? The law is that, the product of a city's rank and its size tended to be constant. If you are in the cities in terms of size and you multiply their size by their rank then you get a constant this is the rank-size-rule.

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Pareto curve Rank size rule by Auterbach (1913) for Germany: rank * size = constant Lotka (1925) for UK: rank*.93*size = constant Saibante (1928): A general Pareto curve: Log (rank) = log A – α log size or Rank = S*size^{-α}

The law is called the rank-size-rule. For depicting this rank-size-rule in demography or in statistics Pareto curve has conventionally been used that, rank multiplied by size is constant or size of a city is constant divided by its rank as the rank increases size of city falls. Lothar for UK developed a similar equation that rank into 0.93 into size of city is constant then in 1928. There was another development and it was suggested this log of rank expressed as log of a constant a minus alpha another constant into log of size depicts the rank size, even much better than the simple rank into size equal to constant or in other words rank can be obtained as a constant s divided by power alpha of the size of the city.

That means if you arrange your cities and towns according to population and you find that the rank-size-rule is followed, then it means that the pattern of urbanization in your country is similar to the pattern expected. On what basis expected on the basis of models developed in the western countries that means your urbanization follows the western pattern and if your cities deviate. And if our cities do not follow the rank-size-rule, then it means there is something unique about urbanization. The urbanized India has to be explained in terms of colonial past and post colonial policy.

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- There is a difference between city primacy (population in the largest city) and urban primacy (population in 1,00,000+ cities)
- In the context of developing countries Pareto curve provides a better fit than the rank-sizerule.
- Primacy is significantly associated with development and urbanization.
- Left to itself urbanization leads to urban primacy.

There is a difference between city primacy and urban primacy. City primacy is defined on the basis of population of the largest city, while urban primacy is defined in terms of population in urban areas of size 100,000 and above. Actually, why this debate among sociologists, writing on urbanization, Kinsley Davis is the most known name and initially Kinsley Davis said that population and economic development are positively related with urbanization that leads to economic development. The economic development in terms, leads to urbanization. It was expected that the relationship between development and urbanization would be of the same kind, as it is existed in the developed countries of today.

But the experience showed that urban population in developing countries was increasing, at much faster rate than urban population increase in today's developed countries when they were at the same level of urbanization. So the concept of dual city over urbanization, someone came up with the concept of over urbanization and for a long time Indian sociologist and demographers talked about, over urbanization thesis. The urbanization in India is not so much the result of economic development, but it is more the result of rural to urban migration caused by unemployment inequality, lack of job opportunities, lack of peace, lack of amenities, lack order and law in rural areas.

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Empirical determination of primacy

- · Fit the Pareto curve
- Log (rank) = $\log A \alpha \log \text{size}$
- Use linear regression method
- Compare the estimated population of the largest city with the observed population
- In the same one can find out theoretical estimate of the urban primacy

Now this primacy is significantly associated with development and urbanization, left to itself, urbanization leads to urban primacy. If you want to determine primacy empirically then you have to fit the Pareto curve the log of rank equal to log A minus alpha log size which can be fitted means values of capital A and alpha can be estimated using linear regression method and by comparing the estimated population of largest cities with the observed population you can say something about primacy. In the same in the same way one can find what is the theoretical estimate from urban primacy.

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Causes of Urbanization

- Urbanization, being a process of population concentration, is caused by all those factors which change the distribution of population by size of locality.
- Thus all those factors which make people move from places of lower population concentration to places of higher concentration lead to urbanization.
- In practice, it refers to growth of urban population in relation to rural population (Box 7.1) and is dependent on the definition of urban and rural localities.
- One may say that urbanization is caused primarily by migration of people from rural to urban areas (or smaller town to large cities).
- This assumes that the natural growth rate of urban and rural areas is similar because urban areas have better health facilities as well as lower fertility.
- However, sometimes this is not the case and urbanization may also be caused by differences in natural growth between urban and rural areas.

Now causes of urbanization, as such population concentration, increasing concentration in certain cities and towns. So, all those factors which change the distribution of population by size of locality lead to urbanization. So, in practice it refers to growth of urban population in relation to rural population. One may say that, urbanization is caused primarily by migration from rural to urban areas. This is assumed that the natural growth. Last time you had asked a question regarding components of growth of urban population and I said that migration is not the only factor for natural growth and migration. Both these factors are important.

And in case of India's urbanization in the recent past, both of them played an equal role by fifty fifty percent growth of urban areas, was due to natural growth. Natural growth of urban area itself was quite high due to high fertility and 50 percent was the contribution of migration. But, now situation is changing as the natural growth rate of urban area has started declining.

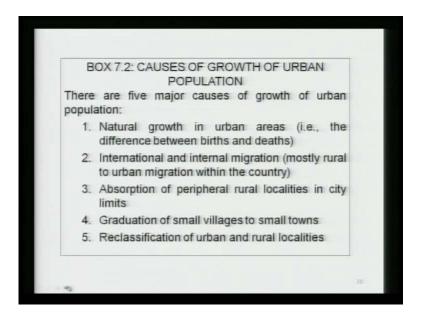
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- In India, in the past natural growth in urban areas has been a major factor in the country's urban growth (Box 7.3).
- Yet, as a rule natural growth and the rural to urban migration are two main sources of growth of urban population and increase in level of urbanization.
- In addition, urban areas and city limits expand and as time passes they tend to incorporate a few villages at the outskirt leading to increase in urban population.
- Sometimes urban population also grows due to graduation, i.e., growth of population of localities which are classified as rural in one census and as urban in the subsequent censuses.
- Lastly, change of definition of urban areas may also increase or decrease urban population.
- Therefore, whenever we analyse trend in urbanization it is important to ask whether the definition of urban population has remained unchanged.

So the contribution of rural to urban migration is going to be much more than the contribution of natural growth. As a rule, natural growth and the rural to urban migration are two main sources in addition to urban areas and city limits expand and as time passes they tend to incorporate a few villages at the outskirt, leading to increase urban population. This called absorption. Absorption of rural areas are at the peripheral level.

Sometime urban population also grows due to graduation, means growth of population of localities which were classified as rural in earlier census and due to natural increase or some other reasons may be migration. In some particular cases their population has risen above of the threshold level and they have become urban. So urbanization increases due to natural increase in urban areas due to migration from rural to urban areas, due to absorption of hinterland due to graduation of rural areas and sometime little bit by definitional changes also.

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Therefore, whenever we analyze trend in urbanization, it is important to ask, whether the definition of urban population has remained unchanged. These are the causes of growth of urban population natural increase, migration international and national absorption graduation and reclassification.

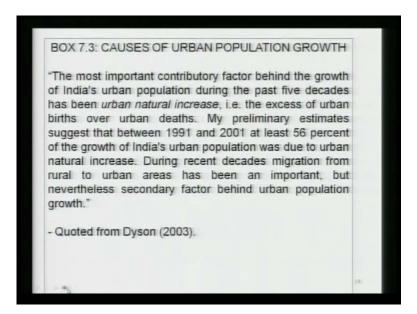
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- According to the Sample Registration Scheme (SRS) data, in year 2008 the natural growth rate of urban areas is 12.6 per thousand (or 1.26 percent) while the natural growth rate of rural areas is 16.5 per thousand (or 1.65 percent).
- This implies that now it is rural-urban migration that will primarily decide the fate of urbanization.
- In absence of rural-urban migration the level of urbanization in India is likely to decline.
- But in the future the natural growth rate of rural areas will also change producing a further change in components of urban population growth.

According to sample registration scheme data in year 2008, the natural growth rate of urban area is 12.6 per 1000 difference between birth rate and death rate or 1.26 percent. While the natural growth rate of rural areas is 16.5 per 1000 or 1.65 percent. These figures show that if rural to urban migration does not take place or only a small amount of migration from rural to urban areas take place, then the level urbanization will remain same, it will not increase. The India will not experience urbanization if there is only a small amount of rural to urban migration, because urban growth rate is much lower than the rural growth rate now. Perhaps that is one reason why, in the last census means, census of 2001 showed a declining rate of speed of urbanization that, as natural increase. In declining the same level of rural to urban migration will contribute less towards the growth of cities in relation to rural population.

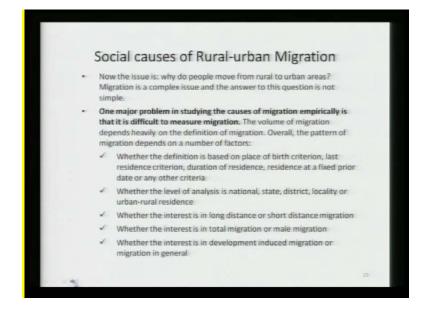
In absence of rural to urban migration the level of urbanization in India is likely to decline. So imagine that your Mahatma Gandhi National Rural Employment act is so successful that, nobody wants to move from rural to urban area. Then the percentage urban in India will start declining, it will not remain 27 percent it can become 26 percent, 25 percent, 24 percent, but gradually as the differences in natural growth rates will be wiped out by demographic transition, then urbanization level will be stagnant. In the future we expect that, the natural growth rate of rural areas will also change producing a further change in components of urban population growth.

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Here is an interesting quote from Tim Tyson, London School of Economics. The most important contributive factor behind the growth of India's urban population during the past five decades has been urban natural increase that is the access of urban birth over urban deaths my preliminary estimates suggest that between 1991 and 2001 at least 56 percent of the growth of India's urban population was due to urban natural increase. During recent decades migration from rural to urban areas has been an important but, nevertheless secondary factor behind urban population. This is from Tyson in 2003 this will not apply to what is happening today.

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Today, the situation is much changed. This is one major problem in studying the causes of migration. If this is so, the natural increase and migration are the major factors and migration is going to determine the level of urbanization more. We have to analyze, why do people migrate? And one major problem in studying the causes of migration empirically is that, it is difficult to measure migration. There are so many definitions of migration, some of which, we saw when we were talking about migration in India earlier.

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Yet, researches on the theme of migration show that several factors are important:
Factors operating at the place of origin because of which people have to think of migrating to other places
Factors operating at the places of possible destination because of which people at other places feel attracted to migrate
Awareness and evaluation of the factors of migration

Yet researches on the theme of migration show that several factors are important. Factors operating at the place of origin factors operating at the place of destination push and pull factors and awareness and evaluation of the factors of migration by individuals.

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- · Economic and psychological costs of migration
- Possibility of assimilation at the place of migration determining whether the migrants continue to stay there or must consider to return back or move to some other places
- Individual level factors some people at some stage of life are by nature (personality) more mobile than others. Among the individual level factors the three most important factors are: psychological factors; demographic factors; and family background.

There are also economic and psychological cause and possibilities of assimilation at the place of migration. If the possibilities of assimilation are diminished due to rise of son of soil type of demand or identity politics, then it will affect the rural to urban migration. And then, there are some individual name factors also. So these are push and pull factors. I thought that I can produce this picture form UNFPA document that last state of world population report in which they are particularly talking about migration. You can see that, this women is migrating to urban areas because of push factors. Push factors related to climatic condition, temperature change natural calamity or she is looking for a safe and peaceful future in the urban area

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The pull factors operating in urban areas are:

- better work and employment situation including possibility of getting a more decent work;
- · higher wages;
- · greater social equality;
- · better education and health facilities;
- closeness to seat of development and power;
- · charm of city life;
- · modernization;
- · better connectivity with the outside world; and
- · better living condition.

There are various types of pull factors and various types of push factors. Pull factor include better work opportunities, equality, education, development, modernization connectivity and living condition.

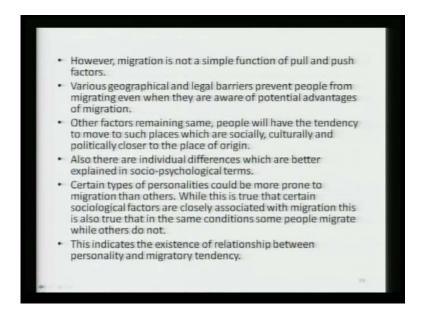
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- In India we also talk of certain push-back factors operating in urban areas because of which rural-urban migrants feel pushed back to native, rural places.
- They are: lack of expected employment opportunities, ethnic segregation and discrimination; greater vulnerability to various risks; poor quality of life; and exploitation.

In India we also talk about certain push factors. Ashish Bose introduced, the concept of push factors, while analyzing 1991 census data, that there are lot of people in India who go from rural to urban areas with hope. But when they do not find their aspiration meeting in urban areas or they find resistance or they become dissatisfied frustrated by

migrating to urban areas then they return back to rural areas. so there is lot of push back situation also in urbanization in India and they are lack of expected employment ethnic segregation, discrimination, greater vulnerability to various risks, poor quality of life and exploitation.

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However migration is not a simple function of push and pull factor there are many other geographical and cultural factors. So, there are lots of factors in migration. It is not a simple function of pull and push factors. There are geographical reasons, legal reasons for an example of legal reasons is that you are not permitted to construct a house in Jammu and Kashmir, you cannot become permanent. There are so many states not only Jammu and Kashmir there are so many states in which you cannot buy property, they are legal reasons. Then there are personal and individual level factors some people who by temperament are migratory and there are some other people, who buy temperament sedentary.

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- One may argue that as the natural increase decreases the growth rate of urban population may also decrease.
- Further, if rural development policies aiming at greater investment in agriculture and expansion of provision for employment generation succeed in mitigating the effect of push factors in rural areas, the growth rate of urban population may decline substantially.
- In this situation India may achieve a higher level of development without having a high level of urbanization.

So that also makes a difference one may argue for the future, one may argue that as the natural increase, decreases the growth rate of urban population may also decrease. So we cannot assume that in the future natural level of urbanization will rise at faster rate or it will definitely continue to rise, it depends on many things. If the rural development policies like NREGA is one but, there are so many other policies, which are directly or indirectly affecting social development in rural areas including nation rural health mission, Jananisuraksha Yojna, maternity benefits, pension benefits, old age security schemes. They are all going to affect the rural to urban migration by lessening push factors in rural areas.

In this situation India may achieve a higher level of development without having a high level of urbanization. So one can say that although urbanization and development are broadly connected, as our sociologist Kinsley Davis suggested in the beginning but, there is this relationship between urbanization and development has to be seen in a historical context. You may have economic development and no urbanization. Your economic development is based on the concept of rur-bans and decentralization of population. The decentralized development may not lead to urbanization or you may have urbanization due to demographic pressure and no economic development.

So there have been decades where we had rapid urbanization. Which was not associated with rapid economic development, all kinds of possibilities are there. If you have so any

questions and comments in your mind please express. Yes actually you have drawn my attention to a very important aspect of urbanization, this is true that I talk more of numbers and I also realize that if we have to talk about urbanization such a vast topic in just three lectures, then you cannot do justice to many things but, one thing is very clear as you rightly pointed out that the nature of urbanization and writings on urbanization in developed countries are very different from the nature of urbanization or writings on urbanization in developing countries.

Therefore in developed countries you find that urbanization is seen more as a result of indigenous change, a spontaneous change and therefore, you could also talk of continuum, you could talk of rank-size-rule. I mention about rank-size-rule diffuses modernization, cities leading to modernization, secularization continuum and contribution of city to economic development. You could talk about urbanization in these terms in the developed countries.

When it comes to developing countries then, urbanization in developing countries is seen more as a result of colonial past. And quite often the relationship between rural and urban areas is posted as though it is conflicting and is exploitative. So, some of you may have read that Lipton's thesis book on Rural Urban Conflicts even in our eleventh five years plan document talks inclusive growth about rural urban conflict. It says that we are developing fast but, the benefits of development are not reaching rural areas and certain types of developments have actually had adverse effect on development of rural areas.

So in less developed countries, we see development of urbanization, more as a result of colonial past exploitative and also over urbanization with primacy without rank-size-rule with city primacy of some large cities or primacy of some large urban localities. And there is also, some writing on how cities in India are infected with communal virus. Cities in place of leading to modernization or in place of be becoming a source of diffusion of new ideas and secular ideas.

Actually many of our cities are infected with communal virus and whenever communal riots start they start from a can point out a small number of cities from where they start. So the over urbanization dual city concept, a large proportion of slum population, poor quality of life in urban areas and people are using the term rur-ban in a pejorative sense.

For urban areas of India, this is a very different kind of depiction, then that exist in the developed countries.

You are right if we had time then we could have spent more time on this issue.

Actually this rank-size-rule is also associated with, what you said about urbanization in the developed countries when urbanization in developed countries increases, then it follows a definite pattern. Which, is the result of the context of development there industrialization, economic development, migration. and it was found as I have given some references in 1920s and 1930s it was found that, in developed countries if you arrange cities of developed countries according to their size, then a kind of rank-size-rule developed means. Some pattern emerges in urbanization in developed countries which is due to the fact that, this is part of indigenous change their forces of industrialization, economic development, modernization and may be evolution or differentiation or whatever.

So there is a pattern and that pattern can statically be expressed in the form of rank multiplied size equal constant. so you could express size of a city in terms of rank, some constant divided by rank but, in case of developing countries like India it has been found that, there is city primacy means there are some cities or population of urban areas in towns and cities of size 100000 and more is much larger than what the rank-size-rule would show.

So the rank-size-rule whole number of people then the rank-size-rule shows that means as compare to as compare to developed countries our urban population is concentrated in some of the large cities. That is, why it becomes a dichotomous and exploitative and exclusive kind of situation. So, Instead of becoming a source of change has becomes a source of exploitation of rural areas. This is what it means we do not have rank-size-rule, it means that we have more primate cities. There may be one primate city or there may be two or more primate cities which have population larger than what the rank-size-rule would permit.

And that is because of exogenous nature of development and urbanization in the country. You also find that it is not those cities in India which have, a traditional religious, political base which have expanded in the recent past. But those cities have expanded in the recent pasts which are either part of colonial policies of exploitation of hinterland or

which are connected with administration of states in post independence period so, our Varanasi, Delhi, and Badrinath. It is not these cities which are expanding or it is not even Agra which is expanding so far, it is Mumbai, Bangalore, Delhi and capital cities or cities with rose due to Englishmen policies of development of this country, leading to exploitation, which is expanding fast. You can ask one more.

This is true that, in the recent past it is not the manufacturing sector as such but, the service sector which is increasing. This is also true that, the employment which is of regular type and in organized sector that has declined. As such organized sector employment has increased but, in organized sector irregular employment or contractual work has expanded. Also it is self employment or employment in service sector which is increasing, if there is an increase in employment in cities.

And therefore, the composition of urban population is changing fast. so when people went to large industrial plants or to become part of bureaucracy, when they got clerical positions, section officer's position or administrative positions at various levels, they were more educated, more modern, more ambitious. And now when self help self employment is expanding or contractual jobs are expanding, then you find more employment in more migration of people form illiterate group or semi educated group or laborers, you find more migration of laborers in these areas.

There in terms of socioeconomic indicators, they belong to lower caste and class of India's population. When these people of lower caste, lower class, lower awareness, lower skills, either they have manual work or semi skilled work. When these people are coming to urban areas, then obviously they will carry a very different mindset than the mindset of people, who came to cities 20 years ago. So you are right the changes in migration, changes in employment policies, changes in development and changes in the composition of migrants will have a bearing upon the quality of population's, institutional patterns, segregation, aspirations, modernity, secularism, social capital, network making. So everything will be affected. Thank you.