# Population and Society Prof. A. K. Sharma Department of Humanities and Social Sciences

### Indian Institute of Technology, Kanpur

## Lecture No. # 20 Population Projections, Migration and Future Prospects

So, this is our fourth lecture on population of India. And this we will after this lecture, we will be completing half of this course out of forty courses like forty lectures, we will be completing twenty lectures today, so this is a special day.

I have not made many slides for today's lecture, because this is the fourth lecture and last lecture on population of India. So, I thought that it will be better if we make it more interactive. So, I would like to answer your questions maybe to answer your questions, sometime I may not have the requisite data right now. But at least qualitatively I can answer your question; two things on which I will focus in slides today are first greater uncertainties, about the future and second migration.

Migration is something which I have not discussed so far all the time, I was talking about size growth rate fertility and mortality. There is a need to talk about migration also; future of India's population perhaps will depend, more on migration than on fertility and mortality processes. So, with that thing in mind, let me go to the next slide Projections. The meaning of projection is assessment of the future based on certain assumptions.

(Refer Slide Time: 01:58)

#### Projections

- It is almost impossible to predict the future population with great accuracy.
- Population projections require an exact understanding of the present day processes and intelligent understanding of future possibilities (Box 6.2).
- United Nations estimates show that by the year 2050 India will be the most populous country of the world and its population will be larger than that of China (Box 6.3).
- This will affect international relations as well as India's place in globalization.

HSS Department, I/T Kamp

There are several terms, using this contact Projections, Predictions, forecast. So, projections are assessment based on any kind of assumption. So, Projections are associated with assumptions. So, you say that assuming this I project, assuming that the birth rate of India will remain constant I project that population of India will be this. You can make one projection or you can make several projections, depending on different assumptions. The difference between projection and prediction would be that, when you say that something is more likely to happen or projections, based on those assumptions which are more likely. Like you can make any assumption, you can say that mortality will not change and you can calculate Projections. You can assume that death rate will be reduced by half and you can make projections. But both the things constancy of death rate or having a death rate, are not equally likely.

You can say that this assumption is more likely and therefore, a certain set of Projection or Projections is more likely to happen. That becomes your prediction. And among predictions also, when you place particular confidence in one particular series of Projection then, they become forecast. So, Projections are based on assumptions and those assumptions, which are more likely to come to produce predictions. Now, it is almost impossible to predict the future population with great accuracy. Our projections have never come true. We have been projecting Indias population right from the beginning. In some context of our reading, the first five year plan last week. And in the

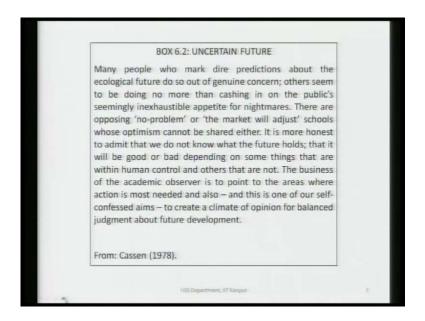
first five year plan the projection was that (( )) several times projections have been made by experts.

Planning commission and different government departments state departments and they have never come true. Registrar general India makes Projections, Projections never come true. Because it is not possible for us, to predict the future course of events, very accurately. Our assessment of what rate family planning practices, will improve or death rate will decline or international migration will go up or down or will remain same. There are lots of uncertainties about them. Population Projections require exact understanding of the present day processes. And an intelligent understanding of future possibilities. In the past you are airing on both the accounts in the past we did not have exact understanding of contemporary processes.

And we also, made mistakes regarding assuming Indias future, with respect to fertility family planning international migration etcetera. Could somebody like in africa where, H I V affects nearly twenty percent in some countries, could someone twenty years back predict. That after twenty years in africa of all the adults twenty percent would be H I V positive no one can. So, how can we say today, whether there will be no tsunami in next ten year next twenty years, no earthquake no droughts no abnormal no epidemics no war.

But is still assuming that things, will remain normal for planning and policy making purposes, we do need Projections. United Nations estimates show that by the year. And so, what the so we are not sure we cannot be sure what will happen in the future. Still for planning purposes assuming that, the present trends are a reasonable guide to what is going to happen in the future. United nation estimates, show they have estimated population of all countries of the world. And projected them up to, two thousand fifty.

In two thousand fifty India will be the most populous country of the world. And it is population will be larger than that of china. And this will affect international relations as well as Indias place in globalization. India would be demographically speaking the largest country of the world in two thousand fifty. But it is a Projection we can never be sure. How can we say that there will be no epidemic from now, between two thousand ten and two thousand fifty? How can we say that birth rate will not, increase or decrease beyond the assumptions, made by the United Nations.



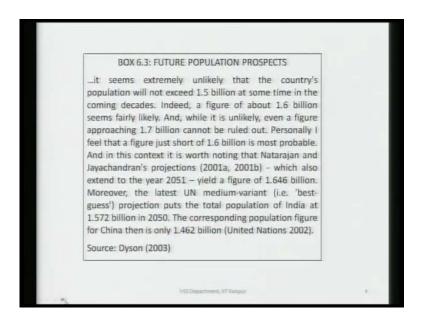
There are two quotes; this is from R H chosen from an institute of development study Sussex. In nineteen seventy eight he wrote a book India population, economy and society this quote is from there. That people who mark dire predictions about the ecological future. Do so, out of genuine concern others seem to be doing no more than cashing in on the publics. Seemingly inexhaustible appetite for, nightmares Malthus. Whom we called doomsday philosopher was perhaps one who cashed on the publics inexhaustible, appetite for nightmares. By saying that population will grow in geometric fashion food can utmost grow in arithmetic progression. And therefore, there will be positive checks on population.

There are opposing no problem or the market will adjust schools whose, optimism cannot be shared either. It is more honest to admit that we do not know what the future holds. That it will be good or bad depending on some things, that are within human control and others that are not. There are things that are within human control like population policy is in within human control, within the control of a state to declare incentives for sterilization. It is within the control of government to provide incentive for taking woman to health facility for delivery. We are doing this [FL] or it is in our hands to provide vaccination to almost all children theoretically, we can assume we can provide vaccination facilities, to all.

But there are many things, which are not within our control. Nowadays like spread of dengue or swine flu this is not completely in our control. And we do not know what alarming proportions; some such viruses can take in the future. The business of the academic observer is to point to the areas where, action is most needed. That is why we need Projection not because; we want to say that by using some mathematical magic we can know that future.

But because by making Projections we can, identify areas of action. If you take action then these are the consequences. So, projections are needed for working out the consequences, of different strategies of development. And this is one of our self-confessed aims, to create a climate of opinion for balanced judgment about future development. I found this paragraph quite interesting, on Projections so, I thought that we share it with you.

(Refer Slide Time: 10:09)



This is another quotation from Timdyson. Timdyson is from London school of economics, on future population he has also worked extensively on Indias population. He has an interesting thing to say to quote; it seems extremely unlikely that the countrys population will not exceed 1.5 billion. At some time in the coming decades. Today we are around 1.2 million it seems, extremely unlikely that the countrys population will not exceed 1.5 billion. Means we can almost be sure, that population of India sometimes would be more than 1.5 billion. Means we can almost be sure that, population of India

sometime would be more than 1.5 billion indeed a figure of about 1.6 billion seems fairly likely.

And while it is unlikely, even a figure approaching 1.7 billion cannot be ruled out. In nineteen seventy one sorry in nineteen seventy five. When doctor karansingh the then health minister was drafting a statement of the first population policy. At that time he said that population of India has these, alarming proportion. And he could just not imagine that, people were saying that if you do not take action right now, then the population of India can reach one billion. And reaching one billion was something unimaginable to handle. It handling one billion people in India was something, unimaginable from the standard of those days.

But we have already crossed one billion. So, who knows even a figure approaching one point seven billion cannot be ruled out personally. I feel that a figure just short of one point six billion is most probable. And in this context it is worth noting, that Natarajan and jayachandrans Projections. Natarajan was associated with registrars general office which also, extend to the year 2051 yield a figure of 1.646 billion. Moreover the latest UN medium variant united nations make certain Projections. And call them high medium low that high means this is the upper limit of Projections; population will not cross those numbers on the higher side.

Low means, that the population will be at least this much, then there is medium variant the best guess. So, according to the United Nations medium variant mean the best guess Projection puts. The total population of India at 1.572 billion in 2050, so roughly 1.6. The corresponding population figure for China then is only 1.46. So, roughly speaking in 2050 India will be the first country of the world in terms of population. And it is population can be 1.6 China will be next. And Chinas population maybe 1.5 or slightly less. Right now, China has less numbers, but sorry right now Chinas population size is more. Because their, fertility has gone below the replacement level. So, growth potential of Chinas population is less yes.

Sir, do they want to say that our population will reach a saturation point and will not increase beyond that.

Yes the idea is to say something like that. That we will continue to grow behind this growth our growth is a result of fertility and mortality. So, mortality would have declined

to perhaps the lowest possible level. Once we reached the death rate of say five it will be almost impossible to reduce it further. Fertility can be reduced further and we do not know, to what low level it can go like in Europe it has gone to below replacement level. Maybe who knows in India also, sometime in the future twenty years from now thirty years from now? Our total fertility rate goes down to one point five it is unlikely, but it can happen. The main thing is that as a result of all these things, at some point population of India will saturate.

What is that point of saturation? So, these experts of United Nations, medium variant projection show.

(Refer Slide Time: 15:09)

	ligration (millions), 20	001
• International		NA
Internal		
Intra-district		181.7
Inter-district		76.8
Inter-state		42.3
From abroad (I	nternational)	6.1 (Declining)
In the context of urb	anization	
Rural-rural		53.3
Rural-urban		20.5
<ul> <li>Urban-rural</li> </ul>		6.2
<ul> <li>Urban-urban</li> </ul>		14.3
Rural destination		59.5
• Urban destination		34.8
Rural origin		73.8
Urban origin		20.5

That perhaps that saturation point will reach at one point six or may be one point seven as cassen says may be one point seven. So, somewhere around one point six one point seven, the population of India will stop growing. So, this is the future population now, Migration we have not talked about Migration at all let me spend some time, on Migration. Research on Migration is much less than research on fertility and mortality. Ideally speaking as, you have vital registration system. For fertility and mortality birth rate and death rate and S R S also, for them now. You must have population registers in which movement of people from one place to another within the country.

From one district to another one city to another, is constantly recorded. Developed countries, have that provision they maintain population registers. And any movement of

people from one place to another place within the country is recorded, we do not have such a system. You can freely move from one part of the country to another. And you do not have to report any where, we do not have that population register systems. So, the major and major source of migration in India is census. Sometime national sample survey has also collected data on Migration, but major source of data on all India basis is census population census of India.

In population census of India there are there are some questions which pertain to Migration directly one is place of birth. So, for all individuals in all individual slips we have a question on place of birth. And based on that we know where, all these people one billion people of India recorded in two thousand one census were born. And for birth we ask the state district, and urban and rural areas. So, we know place of birth. We also have a question on place of last residence means, were you living somewhere else earlier was is that place of last residence. And we have a question on duration of residence, how long have you been living at this place where you are enumerated.

And reason or cause of Migration, among them place of birth has been used as a place for assessment, or migration trend more frequently. There are some problems with place of birth data, but still. And surprisingly, the pattern of Migration emerges from place of birth is very similar to what emerges, from place of last residence. So, for all practical purposes, both these questions give us a good idea of what is happening to Migration. Based on the birth data you can classify the whole population of the country into two categories. Migrants and non Migrants, all those people for whom the place of birth is same as place of enumeration, are non Migrants? At the time of census if you are enumerated in Kanpur. And you are you are born in Kanpur then you are a non Migrant.

And if your place of birth is different from place of enumeration then you are a Migrant. There are problems, like a it cannot take care of return Migrants suppose, you are born in Kanpur. But for education or for the job you have gone to Kerala and now, you have come back or in old age you have come back. So, your place of enumeration and place of birth both place of enumeration today, and place of birth are Kanpur. But you are actually not a non Migrant in between for education or for job you went to Kerala. So, that is a defect in place of birth data. But you have some merits some demerits, in all questions dealing with Migrations.

I had brought some data from the 2001 census, which classifies population into Migrants into non migrants based on place of birth data. Now, on the basis of place of birth you can find out what is the total number of Migrants. You can find out regarding international Migration how many people have come to India from outside. Those who are living in India and have come from somewhere, else you know information about them. But you cannot know how many Indians have left India. You can know before, you are only those who are enumerating today, those who are very much present in India. But if there are, some people who left India for any other country who do not have information, about them from Indian census.

Censuses of those countries where they have gone will have information about them. So, your census will tell how many U S citizens are of Indian origin. And if we can compile all those data from all major countries, which are destinations of Indian Migrate we can know a tentative estimate. Now, India as a whole the figure show international Migration we cannot know completely number of in Migrants out in migrants. We can emigrants we can know, but immigrants we cannot know internal migration within the country. This can also be divided into four parts intra-district, people moving within the district from one village to another village or village to town in the same district, or intra-district one district to another district in the same state.

Then there are intra-state Migrants who move from one state to another. And from abroad international normally, we will assume that interstate Migrants have travelled longer distances than district Migrants. And intra districts Migrants have travelled longer distances than intra district Migrants, though this is not true for all the Migrants. Sometimes, somebody moves from one village of his state to another village of the neighboring state, which may be situated only say ten kilometers. And in a state like U P somebody moves, within the state and moves say more than two hundred three hundred kilometers. So, this is not true for all the Migrants, but overall one can say considering all Migrants that intra state Migrants, have travelled the longest distance intra district. The shortest distance and intra district are in between.

And according to two thousand one census 181.7 million people have travelled intra district, 76.8 inter district 42.3. Three inter-state which sort of proves a law of Migration about which I mentioned when I was talking about Migration model. That most, Migrants have a tendency to move shorter distances. So, intra district is maximum 181.7

inter district in between 76.8 million and intra district 42.3. There are 6.1 million people means, sixty one lakh people who are enumerated in India. But whose place of birth is in some other country actually, this number is constantly declining over the years over censuses this number is declining. Majority of these Migrants were those who came to India at the time of partition.

From todays, Pakistan or Bangladesh some from Burma and as time is passing people have already, become old and they have started dying. Every census gives us a declining number of number of immigrants, on the basis of birth of place birth place data in census. Now, some of these people move from rural to rural to rural areas and some rural to urban. This kind of classification is important for sociologists because, you want to know what are basically the causes of Migration. And sociologists are particularly interested.

(Refer Slide Time: 24:32)

	Migration (millio	115), 2001
	International	NA
	Internal	
	Intra-district	181.7
	Inter-district	76.8
	Inter-state	42.3
	From abroad (International)	6.1 (Declining)
	In the context of urbanization	
	Rural-rural	53.3
	Rural-urban	20.5
	- Urban-rural	6.2
	<ul> <li>Urban-urban</li> </ul>	14.3
•11	Rural destination	59.5
	Urban destination	34.8
	Rural origin	73.8
	Urban origin	20.5

In this rural to urban Migration when they say that Migration and economic, development or Migration and urbanization are correlated. That Migration is caused by pull factors in urban areas; urban areas or industries are developed places. Provide more job opportunities better raise rates better employment better salary and perks and other benefits, better education facilities health facilities. And therefore, rural people are moving or they want to move towards urban areas. And where ever they can afford to find a job or meet the cost of Migration or they have some acquaintance, in urban areas

place of destination. Through whom they can fit in the new urban market they will move. Now, in case of Indian for the time being rural to rural Migration consists of majority of Migrant 53.3.

(Refer Slide Time: 25:43)

International	NA
Internal	
Intra-district	181.7
Inter-district	76.8
Inter-state	42.3
<ul> <li>From abroad (International)</li> </ul>	6.1 (Declining)
<ul> <li>In the context of urbanization</li> </ul>	
Rural-rural	53.3
Rural-urban	20.5
<ul> <li>Urban-rural</li> </ul>	6.2
<ul> <li>Urban-urban</li> </ul>	14.3
Rural destination	59.5
Urban destination	34.8
Rural origin	73.8
Urban origin	20.5

Million people move rural to rural areas. Rural to urban is only 20.5 million urban to rural is 6.2 million and urban to urban is 14.3. By combining these categories, I can say that 59.5 people have rural destination. They may have moved from rural areas or they may have moved from urban areas. There are some people 6.2 million who are moving from urban areas to rural areas. In total 59.5 million people have rural destination. They have gone to some rural place either from rural place itself or from urban place 34.8 million people have migrated towards urban areas 73.8 percent people have migrated from rural areas. And twenty point five percent have migrated from urban areas.

Since our percentage urban in nineteen seventy one no sorry our percentage urban in 2001 was around twenty four percent I suppose. So, if twenty percent people have migrated from urban areas, and seventy three percent from rural areas. Then roughly speaking you can say that both urban and rural populations have become migratory there is some difference. Perhaps rural populations are more migratory than urban population, but,

(Refer Slide Time: 27:32)

Internal migration to become a burning issue
Gradually population will stabilize but migration will become a major issue.
Indian population has become mobile.
As per the Registrar General India out of the 1.02 billion people in the country, 307 million (or 30%) were reported as migrants by place of birth data in 2001 census.
During 1991-2001 this percentage increased from 27.4 to 30.
Thus there has been a steady increase in the number of migrants in the country.

both rural and urban areas are becoming migratory.

Sir what could be the reason for an urban and rural Migration?

Urban to rural Migration you see this Migration in India these figures can normally when we talk of Migration we think that Migration is induced by economic reasons. But in these millions of figures there are, various kinds of Migration. And a majority of them are women who are become Migrant because, they move to in-laws place we practice we have patrifocal society. So, after marriage they move to their husbands place. That means, there are many women who have migrated from small towns to rural by areas by definition are rural to those rural areas.

Because of marriage, then sometime some urban people are moving to rural areas. Because in those rural areas developmental activities or infrastructural activity road construction, some new industries small scale big scale industry some, new industrial town ship is coming. Or there are, some people who work in urban areas, but they maintain relationship with their native village. And after retirement they move to their native place. So, there are various reasons why some people migrate from urban to rural areas.

Rural to rural I think fifty three point five percent usually we have seen that, there is a relationship between Migration and employment of economic development.

Rural to rural is a fifty three point three millions yes.

Usually we have seen a between Migration and employing or migration and economic, but here the reason why?

Actually, what is happening is that in our country there is widespread rural poverty. According to planning commission estimate roughly, twenty seven percent population of India is poor twenty percent in rural area. As in similar percent is slightly less in urban area. And this percentage of poor people is not equally distributed in all geographical regions. There are more poor people, of semi arid zones of say Rajasthan in tribal areas of Jharkhand, and Orissa, Madhya Pradesh. And although schedule tribes have possession of somewhat have higher quantity of land. But the quality of land or the productivity of land is very poor. They have to Migrate in search of employment, not all of them can find employment in industries insurant Mumbai or in Delhi

They Migrate to rural areas in other states wherever, seasonal employment can be found. So, there are many people who move from rural to rural areas. Because there is no agricultural world there is no village world in their, own village. And for at least certain number of months during crop cutting season or harvesting season they have to move to some other rural area. So, when census is conducted say in the month of February or March, this much number of people in rural areas with a separate place of birth is found. In some other rural area is found it is mostly seasonal, rural to rural is mostly seasonal without disconnecting themselves, from their native place.

For certain number of months in a year seasonal we call it seasonal for certain number of months in a year crop cutting or harvest is. There are lot of such people who go from eastern U P to Punjab or Haryana. There are people who go to Jammu and Kashmir. There is lot of such Migration rural to rural Migration within a state. So, if condition in neighboring states is better than, they will go there. Now, internal Migration is likely to become a burning issue in the future, mortality has declined and it will decline further may be by a few points. Fertility is decline is also certain, it is a different matter what is the rate at which fertility will decline in the future. How early we can reach the replacement rate, but the fertility is also declining.

The most uncertain element of population dynamics is migration gradually population will stabilize nobody doubting that population that population will not stabilize. But

migration will become a major issue. Indian population immobile as per the registrar general India out of 1.02 billion people in the country. In 2001 307 million or 30% were reported as migrants is a big percentage. One in three normally we think that Indian people are traditional sedentary they do not move. But the figure show that 30% of Indias population consists of migrants on the basis of place of birth data.

You arrive at similar figure on the basis of place of last residence also. One in three one in three is a migrant. During 1991-2001 this percentage increases from 27.4 to 30. That means population of India is becoming more mobile. It is possible that in two thousand eleven census you will find a much higher figure than 30. Some because, of Pull factors of opportunities, elsewhere and some because of push factor. In years to come perhaps climate change fall in water table in agricultural area rural areas and environmental power norms can become a major factor in migration to other places. That there has been a steady increase in the, number of migrants in the country.

(Refer Slide Time: 34:34)

- Whereas in 1961 there were about 144 million migrants by place of birth, in 2001 Census, it was 307 million.
- With time migration is going to become a burning issue with ethnic conflicts between migrants and natives being reported from several parts of the country.

Whereas in 1961 there were about 144 million migrants by place of birth, in 2001 it was 307. So, number of migrants almost double more than doubled in forty years time. With time migration is going to become a burning issue with ethnic conflicts between migrants and natives, already there is problem of son of soil problem everywhere. It is already there in Mumbai M N S or there are linguistic issues there are political issues, in north east.

Even in some central states north Indian states minister have been found saying that we will not give employment to people belonging to other state we will first give employment. Some years ago nobody could believe that a minister from Madhya Pradesh will make such a statement. But these statements have started coming and once this regionalism and this nativisum starts in some states, it is bound to spread to other places. Recently I read something about this kind of thing in Tamilnadu that in Tamilnadu they are saying that preference in job preference will be given to Tamils.

(Refer Slide Time: 36:09)

This all depends on employment situation, political stability, degree of inequality, environmental situation, and many unforeseen factors.
Table 6.8 presents the data on migration based on place of birth data.
More of internal migration of India is within district or within state.

This all depends upon employment situation; of course it depends upon employment situation. If you need migrants or if they are in positions, which you are not ready to fill your people are not ready to fill. And you need migrants for them; you will welcome migrants, developed countries why do they welcome migrants of professors because, they need professors. Similarly in many rural areas in Punjab and Haryana because, they themselves do not want to work as agricultural laborers. So, they welcome migrants from U P and Bihar. So, this depends on employment situation political stability, degree of inequality environmental situation and many other unforeseen factors. Let I have some more data on migration on the basis of place of birth question.

(Refer Slide Time: 37:09)

Category	Persons	Males	Females
(a) Total Population	1,028,610,328	532,156,772	496,453,556
(b) Born in	1.022,442,977	528,981,861	493,461,116
(c) Born in the place of enumeration	721,460,171	441,746,082	279,714,089
(d) Total migrants (a-c)	307.149,736	90,410,496	216,739,240
(e) Born within the state of enumeration	980,101,274	509,306,087	470,795,187
(i) Born elsewhere in the district		42,781.678	139,017.959
of Enumeration	181,799,637	24,778,327	52,063,139
(ii) Born in other districts of the state	76,841,466	19,675,774	22,665,929
(f) Born in other States in beyond	42,341,703	3,174,717	2,992,213
the state of enumeration	6,166,930	194	227
(g) Born abroad	421		
(h) Unclassified			
Note: excludes 2001 Census data on p Mao Maram, Paomata and Purul Source: Table D1, Census of India 2001.	sub-divisions of		

These are the figures, of migrants. Total population of India was 1,028 millions of them 1,022 were born in India; 721 million were born in the place of enumeration. They are non migrants 721 million were born at a place where they were counted, in the census so they are non migrants. Four hundred forty one male 441 million males and 279 million females were non migrants. Why females are less non migrants? Because, of marriage villagers will practice caste endogamy and village exogamy. So, marriage makes almost all married women migrants, in India due to caste endogamy and village exogamy. After marriage most except may be in some in isolated tribal areas where, they also marry within the village otherwise women become migrants.

(Refer Slide Time: 38:20)

Category	Persons	Males	Females
(a) Total Population	1,028,610,328	532,156,772	496,453,556
(b) Born in	1.022,442,977	528,981,861	493,461,116
(c) Born in the place of enumeration	721,460,171	441,746,082	279,714,089
(d) Total migrants (a-c)	307.149,736	90,410,496	216,739,240
(e) Born within the state of enumeration	980,101,274	509,306,087	470,795,187
(i) Born elsewhere in the district		42,781.678	139,017.959
of Enumeration	181,799,637	24,778,327	52,063,139
(ii) Born in other districts of the state	76,841,466	19,675,774	22,665,929
(f) Born in other States in beyond	42,341,703	3,174,717	2,992,213
the state of enumeration	6,166,930	194	227
(g) Born abroad (h) Unclassified	421		
(i) Oliciassified			
Note: excludes 2001 Census data on p Mao Maram, Paomata and Puru			

So, number of non migrants means those, born in the place of enumeration is much less among females than among males. Total migrants, is 307 male migrants are 90 usually, when you talk of migration due to industrialization urbanization etcetera.

(Refer Slide Time: 38:41)

(a) Total Population (b) Born in	1,028,610,328	532,156,772	
b) Born in		DJ 49100114	496,453,556
	1.022,442,977	528,981,861	493,461,116
(c) Born in the place of enumeration	721,460,171	441,746,082	279,714,089
(d) Total migrants (a-c)	307.149,736	90,410,496	216,739,240
(e) Born within the state of enumeration	980,101,274	509,306,087	470,795,187
(i) Born elsewhere in the district		42,781.678	139,017.959
of Enumeration	181,799,637	24,778,327	52,063,139
(ii) Born in other districts of the state	76,841,466	19,675,774	22,665,929
(f) Born in other States in beyond	42,341,703	3,174,717	2,992,213
the state of enumeration	6,166,930	194	227
(g) Born abroad	421		
(h) Unclassified			

You have this figure in mind. Males we do not have marriage migrants, women who are mostly marriage migrants. And born within the state of enumeration there are two types. Born elsewhere in the district of enumeration and born in other districts of the state. Their numbers are 181 elsewhere in the district and 76.8 million in other districts, of the

state. And then there are 42 million who are born in other states, beyond the state of enumeration.

Among them you will find those who are born in other states beyond the state of enumeration. Among them more males are as you can see that most people travel short distances. We have in all 370 million migrants in the country, based on place of birth data and 2001 census of them 90 are males and two hundred sixteen million females. And as I said the major reason is our sociological, practice of village exogamy and caste endogamy. Then these are the figures of those born elsewhere, in the district of enumeration.

And the number is 181 born in other districts of the state is 76 million. Born in other states is 42 among them we find that males are more than females. That is because; again there is a famous law of migration that females have a preference for shorter migration shorter distance. Males travel longer distances as compared to female. And that is mainly because of that may be males can take more risk or in case of India male migration is more induced by economic reasons.

(Refer Slide Time: 41:01)

State-wise details, showing 1991 population, number of net in-migrants, migration rate and a comparison with 1991-2001 growth in population, and contribution of migration in the growth of each state are given in Table 6.9.
The table shows that

- Bihar and Uttar Pradesh are two most outmigrating states and

- Daman and Diu, Dadra and Nagar, Chandigarh, and Delhi are most inmigrating Union Territories/States.

State wise detail show that by 1991 population, number of net in-migrants, migration you know on the basis of place of birth data using some appropriate analytical methods. We can also, calculate net migration rate between, two census dates like 1991 and 2001. During this ten year time what were the migration rate for different states. When we do

this we find Bihar and Uttar Pradesh, are most out migrating states in India. That does not mean that they do not receive migrants, they receive migrants they also send migrants. They send more migrant than the number of migrant they receive and so, they are net out migrants. And Daman and Diu, Dadar and Nagar, Chandigarh, and Delhi these are most in migrating union territories or states.

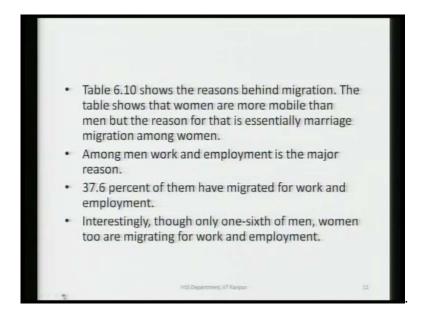
(Refer Slide Time: 42:02)

Danis Dir.	(1995)	Transmission (Control	CORE L	(Mary)	(September 1)	Engertti (80,20)	Sauch Sauch Population (1991-2000)
sellar	Section 1	P(0)(E3)	3600679	16961	7696	100	
3.637 Tales	2000	2006	. 6000	.797	1000	58.1	390
reductions.	767659	40.00	10000	100	3698:	- 20	51/0
Commission in con-	AND	2.80	1.00%	100	Acces	.10	2156
- Inne	25962	1239	200300	189	2000	95	98
1 the	HORSE	H/W-	126660	1779	1,750	62	2046
Cloudgets	HGME	2926	(86,50)	5,000	105001	30.0	43
Changes	C204990	78(9)	AMER:	1,000	Marie .	240	1600
Total & Tope:	1927	4,946	5,000	-	9070	704	MILE
Times & Six	7626	1650	1.00	1,000	6790	163	<b>持</b> 持
7 746	Total Co.	1259	ATTENNA .	ADE:	DHIE.	167	7760
Title -	1969	1009	100	425	10000	18	100
Terr	1038080	1000	455.00	1000	100.00	11.	28
Literatu	JAMES .	12046	10000	200	COLUMN TO A STATE OF THE PERSON NAMED IN COLUMN TO A STATE OF THE PERSON NAMED	144	266
-	SERVICE SERVIC	1000	Secret.	329	1600	100	276
Commed Surrey	138	0.75	1000	288	1000	160	28
1 Noticed	2880	7078	100.00	1391	100	48	1336
Time to	HETCH	170300	7800	7.05	7500	18	22
Time:	3968	200	(0.00	537	19687	0.6	246
The state of the s	539	100	100		100	1.0	17.0
Title being	1000	Target .	PORT	100	108	90	1430
Dispute	199000	13580	741-990	12796	DRM:	100	359
- Norge	Lattor	609	DMT.	76	34396	581	209
Signature .	1200	3.39	10.000	129	76381	12	36
Times.	9000	109	1,000	100	761	310	740
Transact	12000	209	1000	575	939	94	900
Title	0.0000	2000	10000	186		63	3830
Trabley	1000	100	2000	144	1000	32	340
Chapter .	2200	STORE:	10000	2000	1000	127	74.95
- Torre	H100568	2000	ARTON.	688	3690	.00	24
(Flater	4647	239	128	160	2000	187	204
Cloud Golds	719/994	7699	976090	797	(7536)	10	919
Citys .	27526	430	308	136	109	10	3630
The holds:	SCHOOL .	31700	18030	1000	20000	28	2500
- Statement	10000	TORK-	1969	2010	500	740	300
Technique	SECTION .	1000	19028	2926	200	19	100
to different to the second				materia .			

This is the table; the font is so small maybe you cannot see this properly. But the wherever, migration rates are written in parenthesis that is out migration that the state is more out migratory. And among the out migratory states are Andhra Pradesh, Assam, Bihar then Chhattisgarh, Jammu and Kashmir Jharkhand, Kerala is also out migrating. And Manipur, Orissa is out migrating Rajasthan is out migrating and Tamilnadu. With, Uttar Pradesh with net out migration, rate of two percent.

And Bihar with two point seven percent are the most out migrating states of India. That is why all the time whenever migrants are being attacked we learn about Biharis being attacked. Because most of the migrants in city like Mumbai or Delhi, they are from Bihar or Orissa or Chhattisgarh these states. So, whenever people fear that these migrants are coming and taking away our jobs then, immediately Bihar is becoming the centre of attack. And at several places people cannot distinguish between Biharis and U P [FL] both these states, are net and highly out migrating states.

(Refer Slide Time: 44:05)



I also have some data on reason for migration

(Refer Slide Time: 44:13)

Reason for	N	umber of migr	rants	Percentag	ge to total	migrants
migration	Persons	Males	Females	Persons	Males	Females
Total migrants	98,301,342	32,896,986	65,404,356	100.0	100.0	100.0
Reason for	14,446,224	12.373,333	2,072,891	14.7	37.6	3.2
Migration	1,136,372	950,245	186,127	1.2	2.9	0.3
Work/Employment	2.915,189	2,038,675	876,514	3.0	6.2	1.3
Business	43.100,911	679,852	42,421,059	43.8	2.1	64.9
Education	6,577,380	3,428,6734	3,148,707	6:7	10.4	4.8
Marriage	20,608,105	8,262,143	12.345.962	21.0	25.1	18.9
Moved after birth Moved with Households Other	9,517,161	5,164,065	4,353,096	9.7	15.7	6.7

And if you look at the reasons, these are the numbers total number of Migrants, with duration (0-9) years means those who move between 1991 and 2001. Those people who move during, the last or the preceding decade in 2001 means, between 1991 and 2001. Census had a close ended question for that, that the reason for migration could be work or employment business.

(Refer Slide Time: 44:49)

migration         Persons         Males         Females         Persons         Males         Females           Total migrants         98.301,342         32.896,986         65.404,356         100.0         100.0         100.0           Reason for         14.446,224         12.373,333         2.072,891         14.7         37.6         3.2           Migration         1,136,372         950,245         186,127         12         2.9         0.3           Work/Employment         2,915,189         2,038,675         876,514         3.0         6.2         1.3           Business         43,100,911         679,852         42,421,059         43.8         2.1         2.1         64.9           Education         6,577,380         3,428,6734         3,148,707         6.7         10.4         4.8           Marriage         20,608,105         8,262,143         12,345,962         21.0         25.1         18.9           Moved after birth         9,517,161         5,164,065         4,353,096         9.7         15.7         6.7	Reason for	N	umber of mig	rants	Percentag	ge to total	migrants
Reason for Migration         14,446,224   12,373,333   2,072,891   1,136,372   950,245   186,127   12   29   0,3         37.6   3.2   0,3           Work/Employment Business         2,915,189   2,038,675   876,514   3.0   6.2   1.3         3.0   6.2   1.3         43,100,911   679,852   42,421,059   43,8 %   2.1   64,9         43,8 %   2.1   64,9         2.0608,105   8,262,143   12,345,962   21.0   25.1   18.9         48,9 %   2.1   64,9         48,9 %   2.1   64,9         48,9 %   2.1   6.57,380   3,428,6734   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   3,428,6734   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   3,428,6734   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   3,428,6734   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.1   6.57,380   4.353,096   9.7   15.7   6.7         43,5 %   2.	migration	Persons	Males	Females	Persons	Males	Females
Migration         1,136,372         950,245         186,127         12         29         0.3           Work/Employment         2,915,189         2,038,675         876,514         3.0         6.2         1.3           Business         43,100,911         679,852         42,421,059         43.8 May 2.1         64.9           Education         6,577,380         3,428,6734         3,148,707         6.7         10.4         4.8           Marriage         20,608,105         8,262,143         12,345,962         21.0         25.1         18.9           Moved after birth         9,517,161         5,164,065         4,353,096         9.7         15.7         6.7           Households         43,000         43,000         43,000         43,000         43,000         43,000         43,000         43,000         44,000	Total migrants	98,301,342	32,896,986	65,404,356	100.0	100.0	100.0
Work/Employment         2.915,189         2.038,675         876,514         3.0         6.2         1.3           Business         43.100,911         679,852         42,421,059         43.8 %         2.1         64.9           Education         6,577,380         3,428,6734         3,148,707         6.7         10.4         4.8           Marriage         20,608,105         8,262,143         12,345,962         21.0         25.1         18.9           Moved after birth         9,517,161         5,164,065         4,353,096         9.7         15.7         6.7           Households         9,517,161         5,164,065         4,353,096         9.7         15.7         6.7	Reason for	14,446,224	12.373.333	2,072,891	(14.7)	37.6	3.2
Business 43 100.911 679.852 42.421.059 43.8 Mariage 6.577.380 3.428.6734 31.48,707 6.7 10.4 4.8 Mariage Moved after birth 9.517.161 5.164.065 4.353.096 9.7 15.7 6.7 Moved with Households	Migration /	1.136,372	950,245	186,127	12	29	0.3
Education 6.577,380 3.428,6734 3;148,707 6.7 10.4 4.8 Marriage 20,608,105 8,262,143 12,345,962 21.0 25.1 18.9 Moved after birth 9,517,161 5,164,065 4,353,096 9.7 15.7 6.7 Moved with Households	Work/Employment	2.915.189	2,038,675	876,514	3.0	6.2	1.3
Education 6.577,380 3.428,6734 3;148,707 6.7 10.4 4.8 Marriage Moved after birth 9,517,161 5.164,065 4,353,096 9.7 15.7 6.7 Moved with Households	Business	43.100,911	679,852	42,421,059	43.8 01.	2.1	64.9
Moved after birth 9,517,161 5,164,065 4,353,096 9.7 15.7 6.7 Moved with Households	Education	6.577.380	3,428,6734	3,148,707			4.8
Moved with Households	Marriage	20,608,105	8,262,143	12.345.962	21.0	25.1	18.9
Households	Moved after birth	9,517,161	5.164,065	4,353,096	9.7	15.7	6.7
	Moved with						
Other	Households						
COMPANIE CO.	Other						
	Other						

Education marriage moved after birth moved with households and other reasons. You find that 14.7 percent, there is a reason for migration reason for migration work or employment is 3.0. There must have been some error in census. I have just reproduced the census table from 2001 report. One thing is clear that majority of migrant 43.8 percent of all the migrants, are moving for work employment, forty eight point three plus three forty the reason for migration is a total migrants hundred. The work employments do this business education, marriage, moved after move with households. And others this should be the case there is some error in copying the table.

So, you find that 43.8 percent of all the migrants are, those who move because of marriage reasons this is marriage this is marriage. In marriage migration 64.9 percent of all the migrants among women are due to marriage. So, as much as sixty five percent of all the migrants among women move for reasons related to marriage. Among men only 2.1 percent move for reasons related to marriage, for work and employment only three. And in marriage migration 64.9 percent of all the migrants among, women are due to marriage.

As much as 65 percent of all the migrants among women move for reasons related to marriage. Among men only 2.1 percent move for reasons related to marriage. For work and employment only three percent of migrants among women, move for reasons related to work and employment. But 37.6 percent of all the migrants among men move for

reasons related to work and employment. Thus among males the major reason for migration, is work or employment 2.9 percent move for business, 6.2 percent move for education.

Among women most 65 percent move for marriage, 3 percent for work 0.3 percent for business, and 1.3 for education. So, even education is not so important for women you know in terms of statistics of migration. In statistics, of migration the majority of women move for reasons related to marriage. But among men it is work employment business work employment business then education. Marriage reason constitutes only a minor factor 2.1 percent of all the migrants move for this reason.

(Refer Slide Time: 48:13)

#### Conclusion - I

- It appears that demographically speaking, in the future India will experience hyperdifferentiation, a term used in postmodern literature for extreme differentiation leading to dedifferentiation or new forms of integration, uncertain and unpredictable at the moment.
- While some States will be moving towards lower death and birth rates as predicted by classical demographic transition theory, others will be experiencing a second demographic transition, and in some there will be a demand for the third transition leading to higher fertility levels.

HSS Department, IT Kanpu

So, from this discussion, Indias population we can come to final conclusion. It appears that demographically, speaking in the future India will experience hyper differentiation. A term used in postmodern literature, for extreme differentiation leading to dedifferentiation or new forms of integration, uncertain and unpredictable at the moment. While some states will be moving towards lowers death and birth rates. As predicted by classical demographic transition theory. Others will be experiencing, second demographic transition.

And in some there will be a demand at least a demand for the third transition, leading to higher fertility. Means all states are moving towards lower birth and lower death rates, there will some states like second demographic transition means that there will be some states where, birth rates will continue to decline even after reaching below replacement level. But third transition means that after reaching a very low level of fertility say, a total fertility of one point two one point three. There may be a demand Kerala reached below replacement fertility first. Now, in the future it is a possibility a real possibility, that religious communities or civil society or in society at large, may start demanding. That we must do something to raise our fertility levels. And otherwise population of Kerala can be just can deplete, further or can be overpowered by population of other states of nation.

Some such feeling may grow, and there may be demand for raising fertility levels as it is happening in some of the developed countries. And the fertility level may respond to that may be religious organizations can ask women to produce some more childrens. Another conclusion, there will be more of poor and rich divide. Our government documents show that poor and rich divide between classes, between caste urban and rural agricultural industry you know all kinds of divides have widened.

(Refer Slide Time: 20:41)

#### Conclusion - II

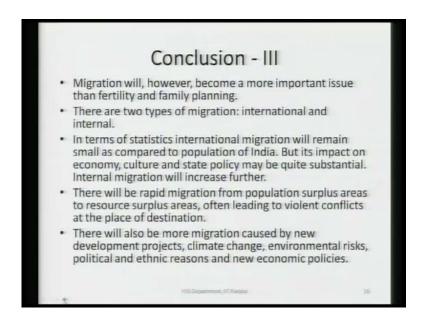
- · There will be more of poor and rich divide.
- Then within each state there will be high and low fertility districts, within each district high and low fertility blocks, and within blocks high and low fertility social classes.
- Within classes again there will be fragmentation due to Westernization, individualization and women's education.
- · Urban and rural differences are likely to continue.

HSS Department, IIT Kanpur

And then within, each state there will be high and low fertility districts. The problem will not be confined to states only within each state, high fertility low fertility states there will be further divisions. Some districts will have high fertility some will low and similarly, within the districts there may be high fertility blocks low fertility blocks. And within blocks and within, blocks high and low fertility social classes. General S C, S T, O B C,

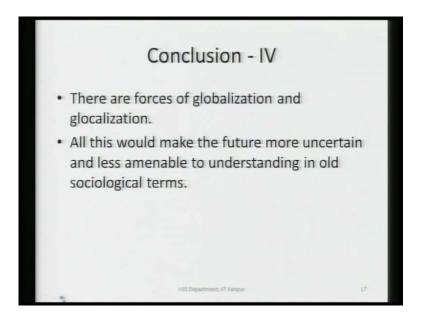
Minorities. Then within classes, again there will be fragmentation due to westernization individualization and womens education, and urban rural differences are.

(Refer Slide Time: 51:19)



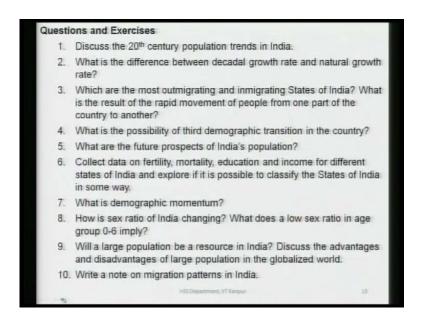
Likely to continue, then migration will however become a more important issue than fertility and family planning. There are two types of migration, international and national internal. In terms of statistics, international migration will remain small as compared to population of India But it is impact on economy culture and state level policy may be substantial. There will rapid migration from population surplus areas like Bihar and U P, to resource surplus areas, often leading to violent conflicts at the place of destination. There will also be more migration caused by new developed projects, climate change environmental risk political and ethnic reasons and new economic policies.

(Refer Slide Time: 52:03)



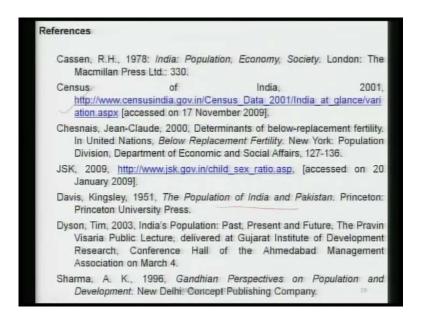
There are forces of globalization and glocalization. All this would make the future more uncertain and less amenable to understanding in old sociological terms.

(Refer Slide Time: 52:17)



I thought I will stop here. I think after attending these lectures you should be able to answer some of these questions. I can also show some books.

(Refer Slide Time: 52:35)



Census anybody interested in population of India sometime refer to census.

Kingsley, Davis the population of India and Pakistan. The most classic book I think now at the end I would like to interested a few questions.

Sir, as you concluded that population from surplus like, places where there are resources, on surplus of people would be moving. In migration would be taking place which might lead to conflict in those areas. On a positive note do you think this could lead to amalgamation of cultures, acculturation taking place what do you think about this.

Yeah ideally, though it may give rise to regionalism and son of soil problems. Our goal our goal has been to create a mix culture, we are a plural society democratic liberal society. And mixing is our goal we want a city or a town or a village. In which people belonging to all caste and community, caste and communities and at the state level linguistic groups live together peacefully. And there is an equilibrium and there are no socio economic disparities among them. But what is happening that because, the number of poor people has not declined the gap between urban and rural areas has not declined. And good quality employment has not expanded.

So, our planning commission document show, that in the tenth five year plan period good quality job means, formal employment in organized sector has declined. So, when the opportunities are limited and there is competition for them. So, sometime this issue

of son of soil or native verses migrants can be raised by politicians to catch on or to catch on the insecurity. That the localites are having when lot of people from outside are coming at one time. One of the city larger cities of the country Mumbai is facing this ethnic conflict now.

And the divide between natives and outsiders particularly north indians is very much clear there. But this has not always been a case, earlier more than thirty percent population of in Mumbai, consisted of migrants and their descendents from U P and Bihar. And there was no problem even in the early days of shiv sena, there was an attack on south Indians. But nobody imagined that a time will come, when there will be conflict between Mumbai caste and north Indians. So, when there is more migration, then they have more insecurity then there is lack of employment and there are insecurities among the localites. Then there is a possibility of rise of conflict on ethnic basis.

But I think it is not a political issue because, in Mumbai many of the corporations is from north India and south India. Determine the politics of that respect in slum area thane, Pune and corporations. That is why I think it is a political issue although, even though it is related with the employment, but it is a political issue.

You can say that there is an issue, poverty unemployment disparities. These are issue they are real issue nobody can deny. But then politicians can cash on these issues and maybe in order to divert your attention from the structural issues, you read the issue of ethnic identity or migration.

Sir, I have doubts regarding the first that is population Projection. The population Projection you are that by two thousand fifty the population will be one point five seven two billion. At that time Chinas population is one point four six two. Now, in two thousand one, Indias population is one point two billion. Chinas is around one point one twenty two is around twenty crore difference.

India already started a lot of family planning program population lot of program. Last two census also, show that for the first time, first the population growth is one point five something. So, I think this prediction is not taking to account the already lot of family planning program and population a stabilization program introduced by India. Now, two thousand ten it is around two thousand fifty it means forty years.

Forty I think India will a high position because, already there is lot of family planning and population.

Actually what happened maybe that forty fifty years ago. China and India were in similar position with regard to fertility and mortality. And you are right that forty years from now may be again the fertility level of India will be as low as the fertility level of china. But India is democratic country, we started family planning program first and in china. And these people were saying that the idea of family planning program is a bourgeois idea. They will close down all the demography in population departments and the demographers, were believed to be some kind of capitalist. So, they attack demographer, but a time came when they realized that it is important for their policy to succeed that their population is controlled.

Since they are more of an authoritarian kind of society so, it was easy for them to implement one child policy. It was not easy for us our family planning program started first. But we are still having the total fertility rate of more than two point five. Their fertility rate has come down to one point something. And when fertility rates total fertility rates decline they show some impact, on birth rate after a long period of time. Due to population momentum even if India achieves a total fertility rate of Chinas level today Indias, population will continue to grow.

Because of younger age structure and population momentum, inbuilt mechanism and due to this age structure differences, between India and China. Indias population will continue to grow for longer period than Chinas population. So, due to two reasons one that Indias total fertility rate is almost double the total fertility rate of India. And second Indias, age distribution is much younger India has the youngest age distribution of the world. Indias, age distribution is much, younger than the age distribution of China. Therefore, India will take much longer time to stabilize than China. So, because of these two effects in two thousand fifty Indias, population would be larger than that of China.

Thank you.