

Population Studies
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Lecture - 04
Population Growth and Development

Well friends, in the last lecture I threw light on the Growth of World Population, which grew extremely slowly for about 2,00,000 or 20,00,000 year 2 million some people believes that tell you demographers for example, say that the human, first human couple must have walked on this planet earth about, 2 million years ago so, 20,00,000. And it grew very very slowly it was in 18 20 for the first time that the world population reached the first billion mark.

And then due to improvement in mortality in the developed countries world population is started growing to some extent, mortality decline fertility also declined, but at a lesser pace so, there was some growth of population. After, 1930 world population started growing at a faster rate, because of improvement in the developed, in the less developed countries. There was some improvement in industrialization, economic development, nutrition, awareness; there was also more of international migration, which led to improvement in socio economic conditions and freedom struggles in different countries.

So, mortality started declining, but the major impact of mortality decline was seen in 1950s and 60s, when there was a sudden and very rapid decline in death rate in today's less developed countries. And the reason was mainly the control of infectious diseases. In that context demographers, economics, sociologists, they started talking of adverse consequences of population growth on development and some people on environment.

Ehrlich even went to the extent that he wrote a book with the title Population Bomb. And attempted to say that there is a population bomb means, rapid growth of population like a bomb exploding in less developed countries.

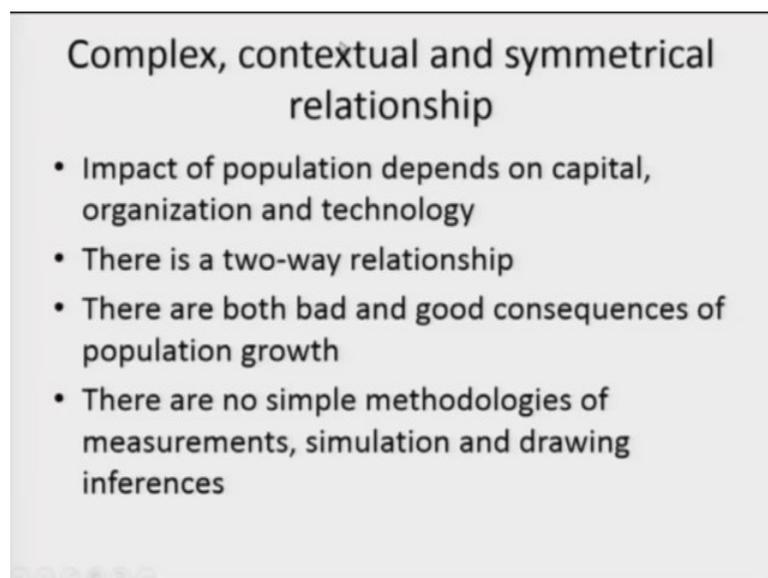
Whose consequences would be much more painful than the consequences of drop of a hydrogen bomb this was the situation. So, Malthusian theory which was given in 1798 and by rejected by Karl Marx and other socialist writers, that again gained an

importance, and Coale and Hoover developed a mathematical model of economy, in the context of India and showed that India would gain from reduction in fertility.

Now, in this lecture I am presenting the other view. And this other view is champion largely by Julian Simon. So, I will mention about his book, I will mention about his ideas. And what these Simon and others having similar views want to say basically, that development growth of income does not depend so much on population, it depends more on the socio economic institutions.

The implied assumption is that, if necessary then population can be controlled, but you cannot make intervention in the economy simply by controlling population. So, this is the view that is presented in these slides.

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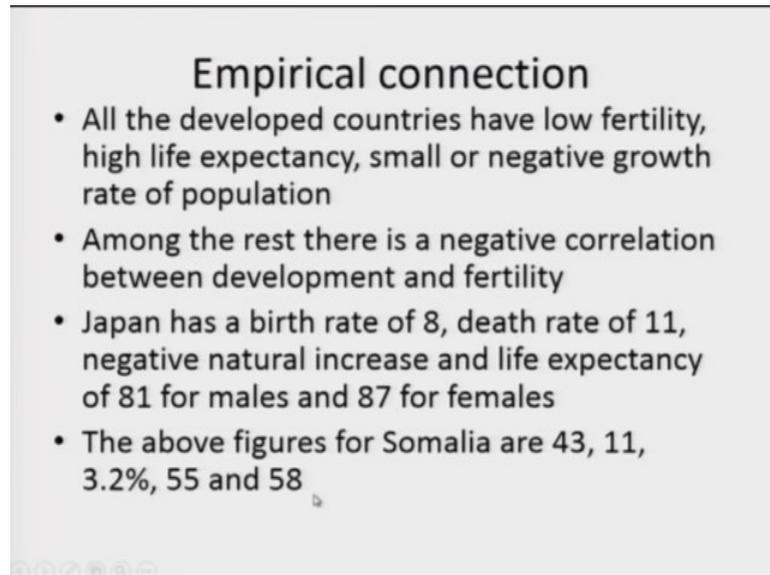
Complex, contextual and symmetrical relationship

- Impact of population depends on capital, organization and technology
- There is a two-way relationship
- There are both bad and good consequences of population growth
- There are no simple methodologies of measurements, simulation and drawing inferences

These people take the view that the relationship between population and development is complex, contextual depends on historical contexts, socio economic context, cultural contexts, family, kinship and there is a symmetrical relationship. Impact of population depends on capital, organization, technology, organization is more important for them, than population and there is two-way relationship, there are both bad and good consequences of population growth.

Bad we saw in the last lecture and this in this lecture, we are talking more of good. There are no simple methodologies of measurement, simulation and drawing inferences.

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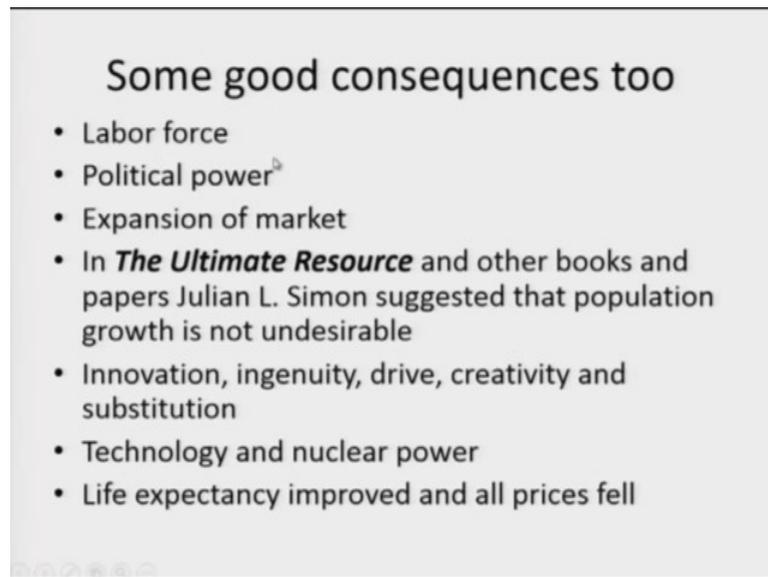
Empirical connection

- All the developed countries have low fertility, high life expectancy, small or negative growth rate of population
- Among the rest there is a negative correlation between development and fertility
- Japan has a birth rate of 8, death rate of 11, negative natural increase and life expectancy of 81 for males and 87 for females
- The above figures for Somalia are 43, 11, 3.2%, 55 and 58

All the developed countries have low fertility, high life expectancy, small or negative growth of population this is true. And this is also true that among the rest there is a negative correlation between development and fertility, but it is two-way. Japan has a birth rate of 8, death rate of 11, negative natural increase and life expectancy of 81 for males and 87 for females.

On the other hand for a least developed country like Somalia birth rate is 43, see the difference between 8 and 43, death rate is 11 and growth rate is 3.2 percent and male and female life expectancies are 55 and 58.

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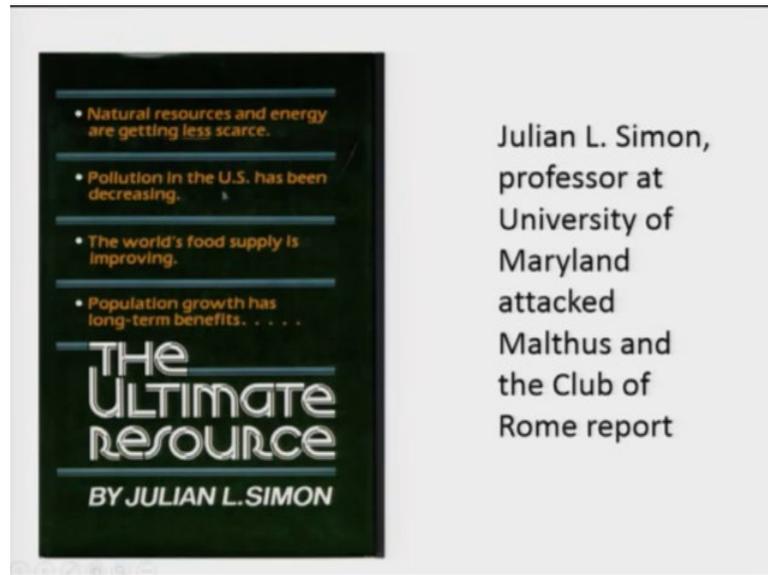


But, there are some good consequences so, while these figures show, that in poor countries growth rate is high in rich countries or advanced countries growth rate is less. But, it does not mean that there is a universal and the necessary connection between population and development and is one way, no it is not one way it is two-way and it is complex.

There are some good consequences of population growth too, labor force, political power, China is number one in population. And therefore, enjoys political power also across the world. Expansion of market today's economic growth depends on the there is more fight for market actually. And growth of population leads to market the book by Julian L. Simon I was referring to is *The Ultimate Resource*. And there are some other books and essays; some published in *Population and Development Review*, the famous *Population Council* journal.

Population growth leads to innovation, ingenuity, drive, creativity and substitution. And Simon believes that because of these factors growth of population will always be good. It leads to improve technology and nuclear power. And life expectancy improved and all prices fell the fact, that in the world growth of population even in fifties and sixties have been associated with more resources, more energy per capita, more consumption of energy per capita, falling prices and all round development, cultural, educational, economic, social shows that population growth has not been a hindrance.

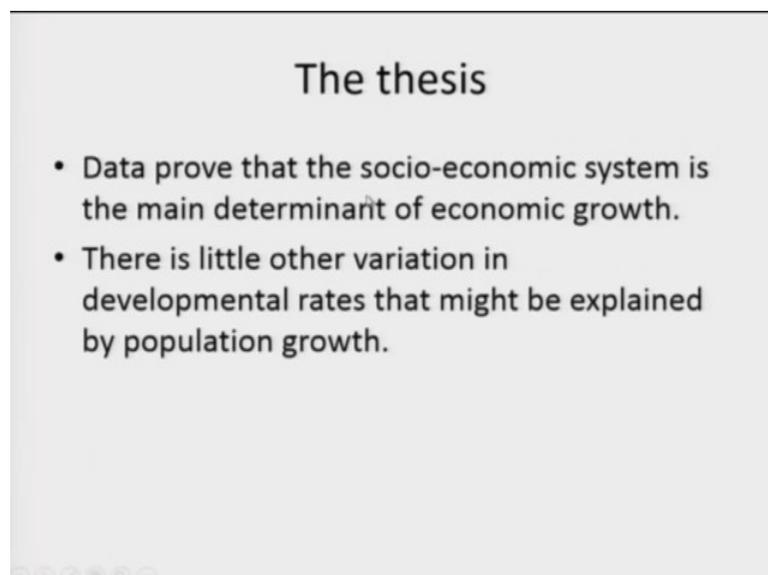
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Julian L. Simon,
professor at
University of
Maryland
attacked
Malthus and
the Club of
Rome report

This is the title of the book and Julian Simon was professor at University of Maryland. And he attacked Malthusian theory and the club of Rome report according to which population growth can be disastrous.

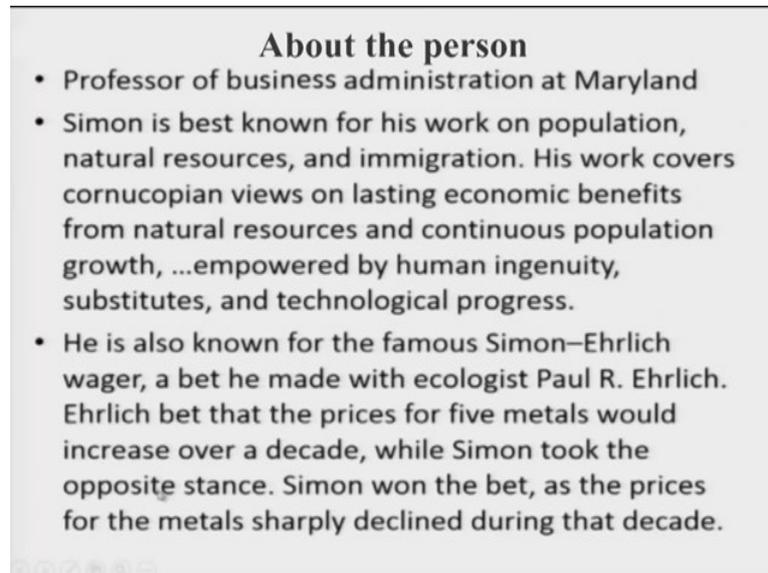
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The thesis that Simon proposes is the data prove that the socio-economic system is the main determinant of economic growth. And by socio-economic system one of the major factors one of the categories you can make of socio-economic institutions is whether they are capitalist or they are socialist.

There is a little other variation in developmental rates, that might be explained by population growth and by taking examples from different countries and different times he wants to prove this point.

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About the person

- Professor of business administration at Maryland
- Simon is best known for his work on population, natural resources, and immigration. His work covers cornucopian views on lasting economic benefits from natural resources and continuous population growth, ...empowered by human ingenuity, substitutes, and technological progress.
- He is also known for the famous Simon–Ehrlich wager, a bet he made with ecologist Paul R. Ehrlich. Ehrlich bet that the prices for five metals would increase over a decade, while Simon took the opposite stance. Simon won the bet, as the prices for the metals sharply declined during that decade.

He was a professor of business administration at Maryland as I said. Simon is best known for his work on population, natural resources and immigration. His work covers cornucopian views on lasting economic benefits from natural resources and continuous population growth, empowered by human ingenuity, substitutes and technological progress. He is also known for the famous Simon-Ehrlich wager, a bet he made with ecologist Paul Ehrlich the person who wrote population bomb.

Ehrlich bet that the prices for 5 metals would increase over a decade, because of greater demand because of population growth, while Simon took the opposite stance that prices would fall. Because, of human creativity, ingenuity and developments Simon won the bet, as the prices for the metal sharply declined during that decade.

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Major contribution in the field of population

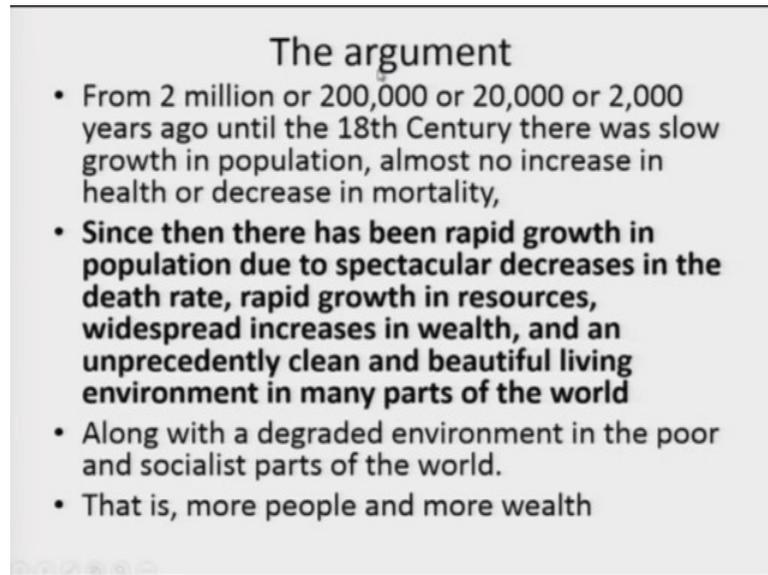
- 1981 book *The Ultimate Resource*
- It is a criticism of what was then the conventional wisdom on population growth, raw-material scarcity and resource consumption.
- Simon argues that our notions of increasing resource-scarcity ignore the long-term declines in wage-adjusted raw material prices. Viewed economically, he argues, increasing wealth and technology make more resources available; although supplies may be limited physically they may be viewed as economically indefinite as old resources are recycled and new alternatives are assumed to be developed by the market.

Major contribution of Simon in the field of population one is this 1981 book the ultimate resource. It is a criticism of what was then the conventional wisdom on population growth, raw material a scarcity and resource consumption. Simon argues that our notions of increasing resource scarcity ignored the long-term declines in wage-adjusted raw material prices. Viewed economically, he argues, increasing wealth and technology make more resources available. So, there will be no a scarcity of resources, because technology can make more resources of a different kind available.

Energy resources have been changing and that is one reason why you know in place of depending on firewood, horses, coal, now we depend on electricity we depend on LPG, we depend on nuclear power and in totality despite growth of population, despite population explosion, per capita availability of energy use has increased. So, population has not been a hindrance.

Although, supplies maybe limited physically, they may be viewed as economically indefinite as old resources are recycled. Now, there is a movement for recycling of resources and new alternatives such as solar energy in our time are assumed to be developed by the market.

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The argument

- From 2 million or 200,000 or 20,000 or 2,000 years ago until the 18th Century there was slow growth in population, almost no increase in health or decrease in mortality,
- **Since then there has been rapid growth in population due to spectacular decreases in the death rate, rapid growth in resources, widespread increases in wealth, and an unprecedentedly clean and beautiful living environment in many parts of the world**
- Along with a degraded environment in the poor and socialist parts of the world.
- That is, more people and more wealth

His argument was as follows from 2 million or a 200000 or 20, 000 or 2, 000 years ago means he is not sure, when human beings evolved on this planet until the 18 century; there was slow growth in population, almost no increase in health and decrease in mortality. When population was today we say that population growth must be controlled and it should be 0 population growth or as low as possible, but when population was 0 population growth rate and or the rate of growth was very very small.

Till the 18 century, then there was no improvement, no increase in health, no increase in life expectancy, no decline in mortality and no development. The kind of development that took place during last 200 years 300 years, that is amazing from the standard of what happened or what may have happened during last 200000 or 20,000 years. Since, then there has been rapid growth in population, due to spectacular decreases in the death rate, rapid growth in resources, widespread increase in wealth, and an un presidentially clean and beautiful living environment in many parts of the world.

Along with a degraded environment in the poor and socialist parts of the world so, he deliberately saying that environment is more degraded, in the poor countries not the rich countries and it is more degraded in the socialist countries, rather than in market economies. That is more people and more wealth.

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Drag on development

- For many years until recently, it was thought by "development economists" that population growth is a drag upon economic development in poor countries.
- Population conferences, beginning 1974, maintained it.
- The U.S. State Department's Agency for International Development (AID), the World Bank, and the United Nations Fund for Population Activities (UNFPA), have acted on the assumption that population growth is the key determinant of economic development.
- This led to misdiagnosis of such world development problems as supplies of natural resources, starving children, illiteracy, pollution, and slow growth.
- Population funds wasted.

For many years until recently, it was thought by “development economists” that population growth is a drag upon economic development in poor countries. Population conferences, first population conference was held in Bucharest in 1974 and that maintained this position.

The US State Department’s Agency for International Development, the World Bank, and the United Nations Fund for Population Activities UNFPA, have acted on the assumption that population growth is the key determinant of economic development. And if less developed countries want to develop, they will have to control their population growth rate.

This led to misdiagnosis. According to Julian Simon this led to misdiagnosis of such world development problems as supply of natural resources, starving children, illiteracy, pollution and slow growth. And population funds wasted.

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Julian Simon's Cornucopian explanation

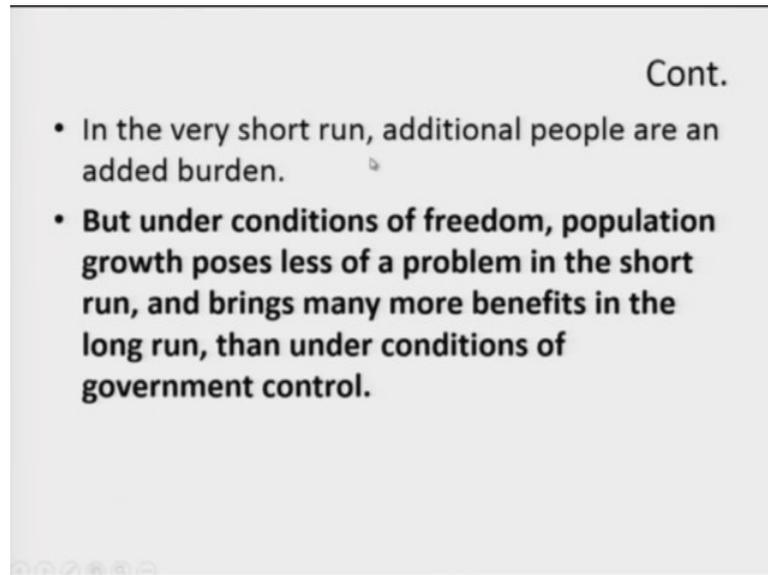
- First, there is persuasive explanation for why some countries grow faster than others, and the explanation has nothing to do with population growth. This factor leaves little room for population growth to be the cause of slow growth.
- **Second, there is persuasive direct statistical evidence that population growth is not associated negatively with economic development in the short or intermediate run, and may well be a positive influence in the long run.**

Population Funds is referring to funds is spent by UNFPA and other organizations on controlling population growth in the developing countries. Julian Simon's Cornucopian explanation is this two things first, there is persuasive explanation for why some countries grow faster than others and the explanation has nothing to do with population. This factor leaves little room for population growth to be the cause of slow growth. It is difficult to maintain the position that worlds developed countries have grown or they have become developed, simply because they controlled their population.

And less developed countries are lagging behind because of rapid population growth. Actually there are so, many political economic theories including the theory of chain of exploitation, the world system theory, which show that politic and economic factors, for chain of exploitation or the relationship between core and peripheral these kinds of factors have been more responsible for development, there is not one single theory of development.

Second, there is persuasive direct statistical evidence. That population growth is not associated negatively with economic development in the short or intermediate run and may well be a positive influence in the long run.

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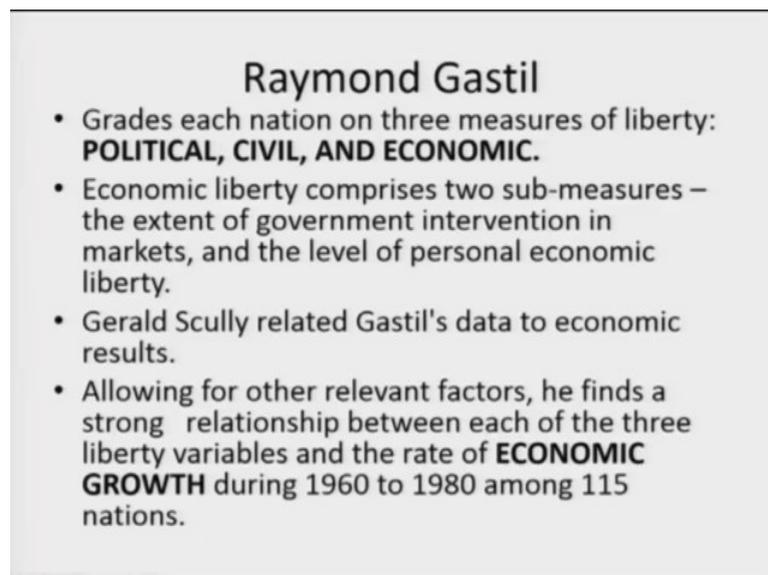


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- In the very short run, additional people are an added burden.
- **But under conditions of freedom, population growth poses less of a problem in the short run, and brings many more benefits in the long run, than under conditions of government control.**

In the very short run, additional people are an added burden. Sure, Coale and Hoover also accept this, but under conditions of freedom liberty, population growth, poses less of a problem in the short run and brings many more benefits in the long run than under conditions of government control. Simon was attacking the capitalist kind of institutions and was favoring socialist countries.

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Raymond Gastil

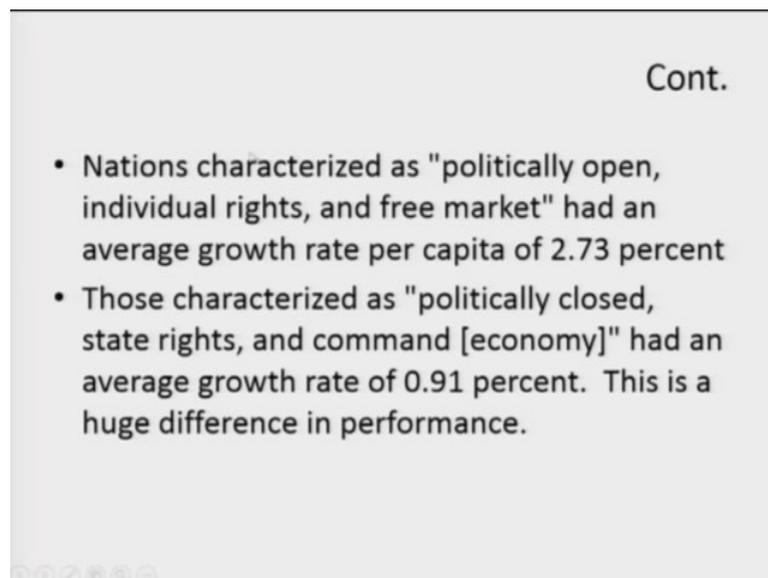
- Grades each nation on three measures of liberty: **POLITICAL, CIVIL, AND ECONOMIC.**
- Economic liberty comprises two sub-measures – the extent of government intervention in markets, and the level of personal economic liberty.
- Gerald Scully related Gastil's data to economic results.
- Allowing for other relevant factors, he finds a strong relationship between each of the three liberty variables and the rate of **ECONOMIC GROWTH** during 1960 to 1980 among 115 nations.

There is another important name here Raymond Gastil. He is also said something similar. He degraded each nation on three measures of liberty; they are all libertarians and give

more importance to market, individual decision making rationality, rather than institutional controls. And these three liberties are political civil and economic. His thesis is that wherever these liberties are more, there is a rapid growth of development. Economic liberty comprises two sub-measures, the extent of government intervention in market and the level of personal economic liberty.

Gerald Scully related Gastil's data to economic results. Allowing for other relevant factors, he finds that there is a strong relationship between each of the three liberty variables means political, civil and economic and the rate of economic growth during 1960 to 1980 among 115 nations. So, he took a sample of 100 and 50 nations and found that each component of liberty, each dimension of liberty political civil and economic was associated with economic growth.

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- Nations characterized as "politically open, individual rights, and free market" had an average growth rate per capita of 2.73 percent
- Those characterized as "politically closed, state rights, and command [economy]" had an average growth rate of 0.91 percent. This is a huge difference in performance.

Nations characterized “politically open, individual rights and free market” had an average growth rate per capita of 2.73 percent. And those characterized as “politically closed, a state rights command economy” had an average growth rate of 0.91 percent. This is a huge difference in performance.

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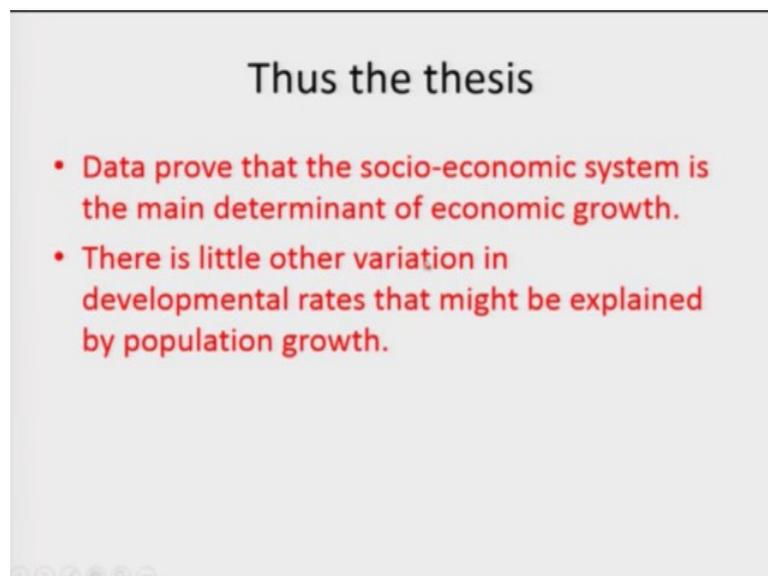


Post World War II

- Three nations - Germany, Korea, and China - were split into socialist and non-socialist parts, producing three pairs of countries whose members began with the same culture and language and history.
- The members of the pairs also had much the same standard of living when they split apart, and the same birth rates.
- Their subsequent histories enable us to determine the effect of economic system, because it is the only relevant variable that differs between the elements of each pair.

Three nations Germany, Korea and China were split into socialist and non-socialist parts, producing three pairs of countries whose numbers begin with the same culture and language and history. The members of the pairs also had much the same standard of living, when they split apart and the same birth rates. Their subsequent histories enable us to determine the effect of economic system, because it is the only relevant variable, according to these people economic system is the only relevant variable, which explains rate of growth of income or development.

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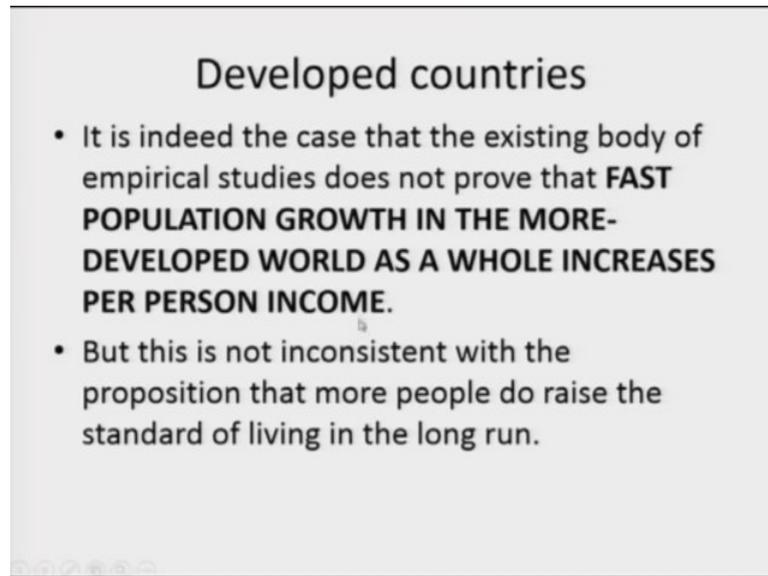


Thus the thesis

- Data prove that the socio-economic system is the main determinant of economic growth.
- There is little other variation in developmental rates that might be explained by population growth.

Data prove that socio economic system is the main determinant of economic growth, there is little other variation in developmental rates that might be explained by population growth.

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Developed countries

- It is indeed the case that the existing body of empirical studies does not prove that **FAST POPULATION GROWTH IN THE MORE-DEVELOPED WORLD AS A WHOLE INCREASES PER PERSON INCOME.**
- But this is not inconsistent with the proposition that more people do raise the standard of living in the long run.

So, in developed countries population, fast population growth in the more developed world as a whole increases per person income; more demand for capital so, more capital investment and more development, but this is not in consistent with the proposition that more people do raise, by standard of living in the long run.

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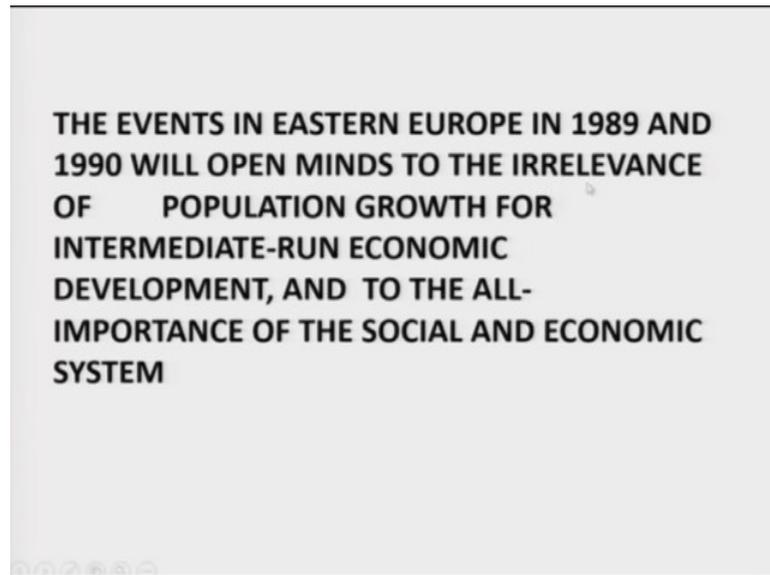


Population growth

- Contribute to desire to be more productive
- Intellectual fecundity
- Innovations
- Education, urbanization, change
- Increased trade and consequent growth in cities

Population growth contributes to desire to be more productive, intellectual fecundity, innovations; you want to earn more because you have to support a large family. Especially, in the agricultural settings this has been noticed in several countries, education, urbanization, and change social change, increase trade and consequent growth in cities.

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The events in the Eastern Europe in 1989 and 1990 will open minds of the irrelevance of population growth for intermediate run economic development and to the all importance of the social and economic system.

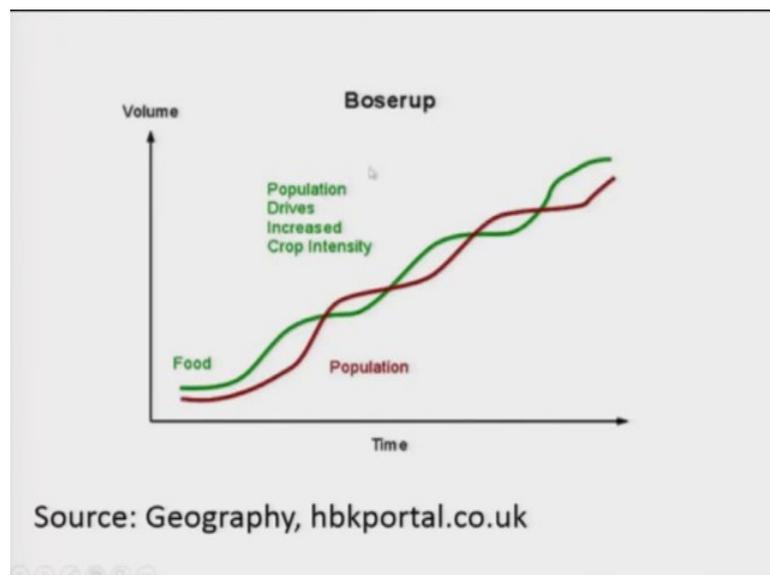
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Large family a drive for expanding food production

- Ester Boserup
- A Danish economist
- Argued that in agricultural societies population growth may also lead to improved productivity through a drive for expanding food production for a larger family

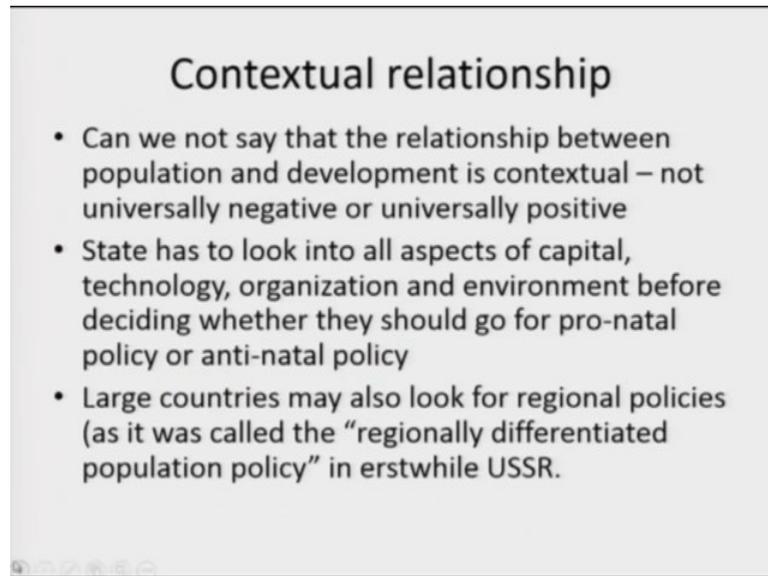
Largely families a drive for expanding food production, I said in agriculture sector, a large family can be an incentive for working harder and therefore, for development. And this was clearly articulated by Ester Boserup, who was a Danish economist. He argued that in agricultural societies population growth, may also lead to improved productivity through a drive for expanding food production for a large family.

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This is Boserups model with time, population growths, this red line and food also grows. He believed that in agriculture sector, food production will grow with growth of population.

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The slide is titled "Contextual relationship" and contains three bullet points. The text is as follows:

- Can we not say that the relationship between population and development is contextual – not universally negative or universally positive
- State has to look into all aspects of capital, technology, organization and environment before deciding whether they should go for pro-natal policy or anti-natal policy
- Large countries may also look for regional policies (as it was called the “regionally differentiated population policy” in erstwhile USSR.

The relationship is contextual between the two the relationship is contextual, large countries may also look for regional policies; this means contextual means that, large countries may look for regionally differentiate differentiated population policies as it was done in USSR. USSR was a socialist country and still they did not have a uniform policy for the entire Republic, in European part fertility was less and development was also less in Asian part fertility was high development was less.

So, they went for without bothering about that, this may create religious conflicts and all they decided that they will start family planning programs in Asian part and encourage fertility in the European part. Actually, what the Julian Simon wanted to say, that population all though he forcefully said that population growth can be conducive to economic development.

But, I think his major point was that it is the nature of socio economic institutions, which affect the process of economic development. He compared different countries, he looked at prices, he also looked at case studies as of China. China was a communist country and initially when communism was implemented strictly. There was collective control of farms; there was starvation very slow rate of growth of food. When the economy was

liberalized as we know that China became a power in the world not by enforcing communism so much by it was by adopting a mixed economy.

So, when China liberalized its agricultural policies. And moved farmers from agricultural sector to non-agricultural sector industry and made individuals the owners of their farm, then the starvation they were suffering from ended and there was much more growth in agricultural sector.

So, it is liberty creative freedom, they give more importance to liberty political liberty, economic liberty, social liberty, wherever there is more liberty, then there is more development and wherever there are more of controls as in communist regime and so, called socialist regimes, that affects development adversely irrespective of population trends.

So, this is what these people say that population trends may play some role, but not much the major factor the major determinant of development is the institutional situation, whether a country, whether a state controls everything, or whether a state is such that there is more liberty, political, economic and social. These people are more in favor of liberty. And they show that historically or cross sectionally population growth has never prove to be a problem population growth can be good also.

So, we have seen both the points of view one Malthusian and another libertarian as of Julian Simon.

Thank you.