

Population and Society
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Lecture No. # 26
Marxist Theory Of Population

So, friends we were discussing a speculative theory of population, and last time we discussed the Malthusians theory of population. If you remember according to Malthus, there is a natural law for plants, animals, human beings according to which population can grow in geometric fashion, and double in every 25 years cycle. While means of production in best possible circumstances, can grow only arithmetic progression.

So eventually when population grows like 1, 2, 4, 8, 16 and food as 1, 2, 3, 4; so this gives rise to imbalance. This imbalance between population, and food cannot continue for long, so there are checks, and it talks of two types of checks, positive checks and preventing checks. Although checks on populations which are exercised through raising the death rate, they may be manmade, they may be nature made.

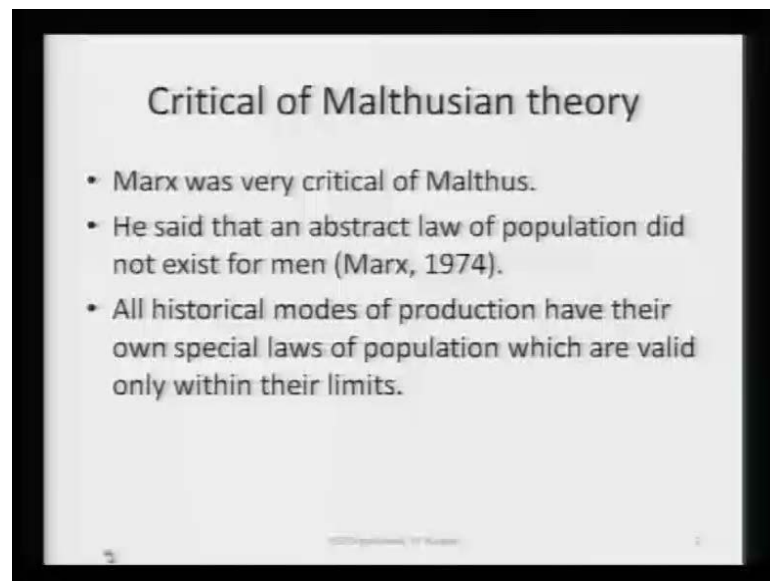
Manmade means wars, conflicts, suicides, homicides, child exposure, female infanticide; and nature made means epidemics or natural catastrophe. They are positive checks, and checks through reducing birth rates, such as family planning, raising age of marriage or prostitution, homo sexuality; these are all preventing type of checks which, may further be classified into vice and misery.

Malthus wanted to say that humans can never be happy, because happiness according to him lies in healthy loving and sexual relationships between adults, uninterrupted by any kind of contraception or anything. But if this happens then there are long term bad consequences, and imbalance of population leading to wars or all those factors, which can raise the death rate of population.

Now, this theory of population by Malthus was most criticized by Karl Marx, and today we are going to discuss about Marxist theory of population. I thought that while discussing Marxist theory of population, I must say what Marxist theory is... What are

various types of surplus population? What are the causes of surplus populations? And then to understand Marxist theory of population may be, we have to go a bit beyond Marxist theory of population, and take of the concept of conflict or dialectical materialism or I mean in the broader framework of Marxist theory of society we have to see.

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So, why was Marx critical of Malthusian theory? Marx was very critical of Malthus and he said, that an abstract law population did not exist for men. The kind of abstract law that Malthus was talking about, may have existed for plants and animals but such a law does not exist for humans.

All historical modes of production have their own special laws of population, which are valid only within real limits. You know this course on population is a new course for you but as a student of sociology you have already done a theory course.

And in theory you have dealt with Marxist theory of society. Now, what Marx wants to say that as society progresses you know initially society was in the stage of classlessness primitive society, called a primitive classless society.

From primitive classless society came class societies, masters, slave, feudal then bourgeois or capitalist society and then he suggested that, due to its own internal

contradictions, bourgeois or capitalist society would be replaced by some kind of socialist society.

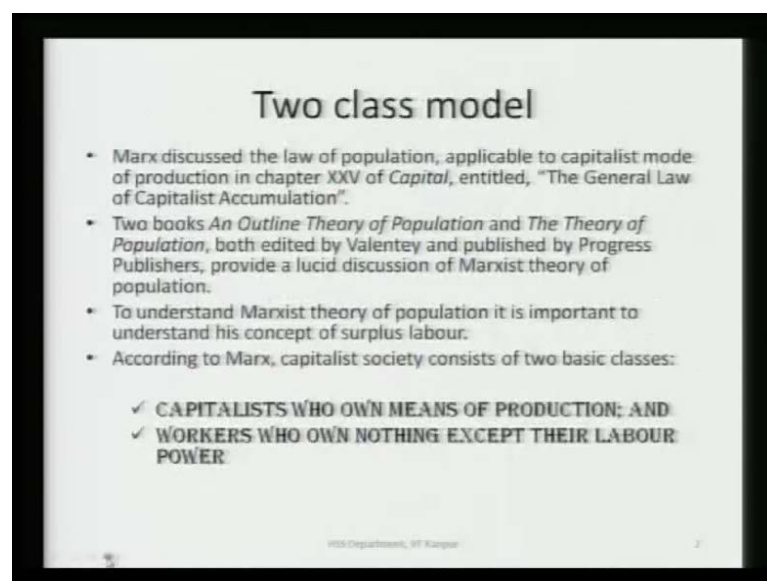
And then socialist society will pave the way for communist society. Now according to Marx, what kind of law of population exists depends on, in which stage of development the society is. And he would also like to distinguish between different theories of populations like theory of birth rate, theory of death rate, theory of migration rate and a theory of migration which is valid for ancient society or primitive society, is not valid for feudal society.

The rate of migration, the reasons behind migrations, the impact of migration on socialist structure, what is valid for feudal society is not valid for bourgeois society. The laws of migration, for feudal and bourgeois society are different and the same laws did not exist in future socialist or capitalist society.

Likewise, laws of birth rate or death rate so laws of population are valid only within their limits these limits are set by development of their modes of productions or stages of productions.

So for different types of stages of productions or for mode of productions you have different types of laws and you cannot say there is any natural law which will apply to all types of human societies irrespective of their stage of development.

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Two class model

- Marx discussed the law of population, applicable to capitalist mode of production in chapter XXV of *Capital*, entitled, "The General Law of Capitalist Accumulation".
- Two books *An Outline Theory of Population* and *The Theory of Population*, both edited by Valentey and published by Progress Publishers, provide a lucid discussion of Marxist theory of population.
- To understand Marxist theory of population it is important to understand his concept of surplus labour.
- According to Marx, capitalist society consists of two basic classes:
 - ✓ CAPITALISTS WHO OWN MEANS OF PRODUCTION; AND
 - ✓ WORKERS WHO OWN NOTHING EXCEPT THEIR LABOUR POWER

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As you know that for Karl Marx there is a two class model of capitalist society interestingly although in developing his theory of communism he talks about various types of stages of development. But ultimately the analysis that Marx has made in his life time based on empirical fact statistical data economic data he is not confined to analysis of capitalist society. It is only in giving the framework to explore issues pertaining to social change that he talks about dialectical materialism or stages of development but the analysis that he makes is the analysis of capitalist society, he does not analyze socialist society he does not analyze.

He does not write much about communist society we do not get a blue print of communist society from the writings of Karl Marx, except some broad statements of purpose this theory of population in original form i read in chapter 25 of capital and the title of the chapter is The General Law of Capitalist Accumulation.

I am referring to 3 volumes of works of Marx; all lists in the form of this book capital by progress publication. In addition apart from this progress publications of 3 volumes of capital there are 2 other books by the same publishers progress publishers.

A book an Outline Theory of Population and another book with the title The Theory of Population; both these books are edited by valiantly and published by progress publishers, and if you combine these 3 things chapter 25 of capital, and these 2 books Outline Theory of Population and Theory of Population, then you can understand the Marxist Theory of Population well.

And to understand Marxist Theory of Population; it is important to understand the concept of surplus labor. According to Marx a capitalist society consist of 2 basic classes, Capitalist who own means of productions and Workers who own nothing except their labor power. So in Capitalist Society a **Capitalist Society** is a class society, although there are so many other classes also Marx himself it is interesting to see that Marx who is always analyzing society in the framework of class understood the difficulty of conceptualizing or defining caste sorry **conceptualizing or defining class**.

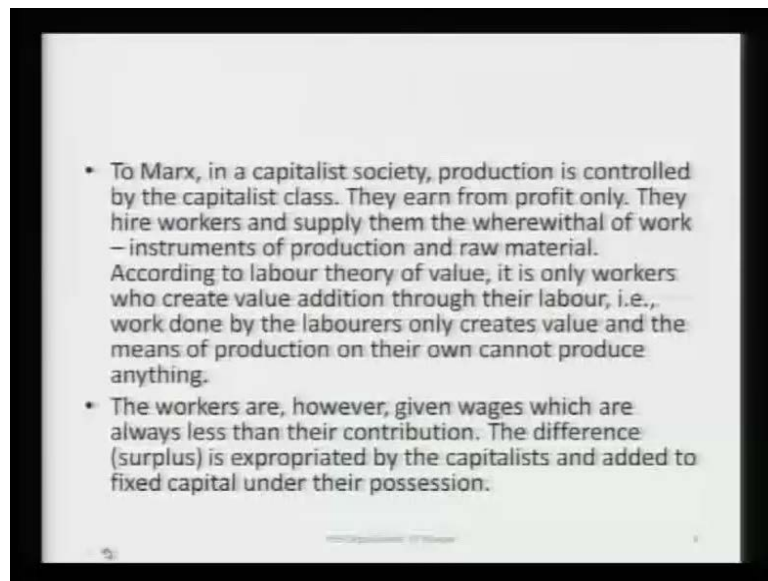
And therefore, he systematically postpone discussion of class, and it was in the last chapter of the capital when he started writing on class systematically, he could write only one and half pages and he died. So, the concept of class so vital to Marxist theory remains incomplete by Karl Marx. And it was later a German sociologist **(())** whose

theory of stratification in terms of authority relationship riding in a course on social stratification, who actually completed the chapter on class.

(()) claimed that this is how Marx would have completed the chapter on class in the book Capital. And while writing that chapter by taking phrases and quotations and statement from earlier portions of capital and from other writings of Karl Marx he developed a critical attitude towards Marxist theory.

And as you know that later he became a critique of Marxist theory of stratification and develop his own theory. So, in that last chapter on class Karl Marx himself defines a number of classes, but in Marxist theory he talks of 2 classes in the sense that the most basic of all the classes which play a (()) role in transformation of society from capitalist mode of production to socialist mode of production are only these two capitalist and workers.

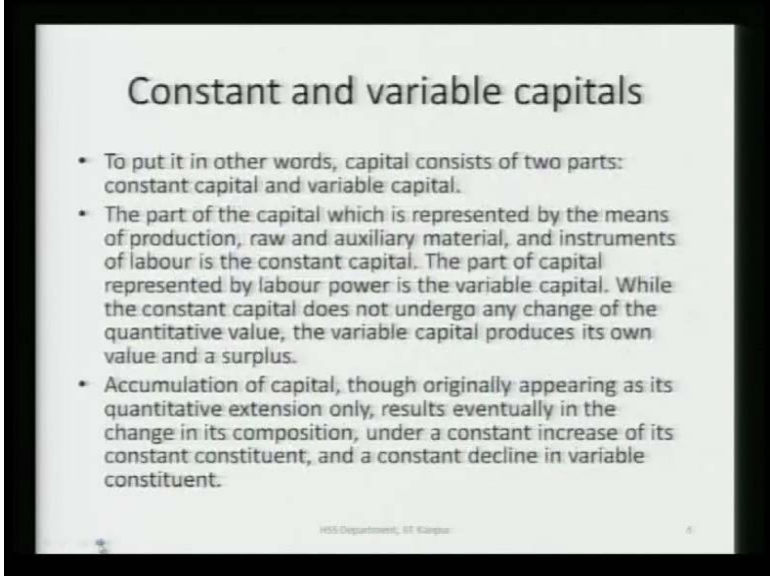
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To Marx in a capitalist society production is controlled by the capitalist class, they earn from profit, they hire workers and supply them the wherewithal of work means instruments of productions and raw material. So production needs 3 things instrument of productions, raw materials and workers. And you know the instrument of productions on their own cannot produce anything, similarly raw material itself cannot produce anything.

It is only when workers work on instruments of production on raw material that values added to them. So, according to labor theory of value it is only workers who create value addition through their labor that is work done by the laborers only creates value and a means of productions on their own cannot produce anything, that is why Marxist theory of value is also called the Labor theory of value. So, the workers are however given wages which are always less than their contribution the difference of surplus is expropriated by them by capitalists and added to fixed capital under their possession.

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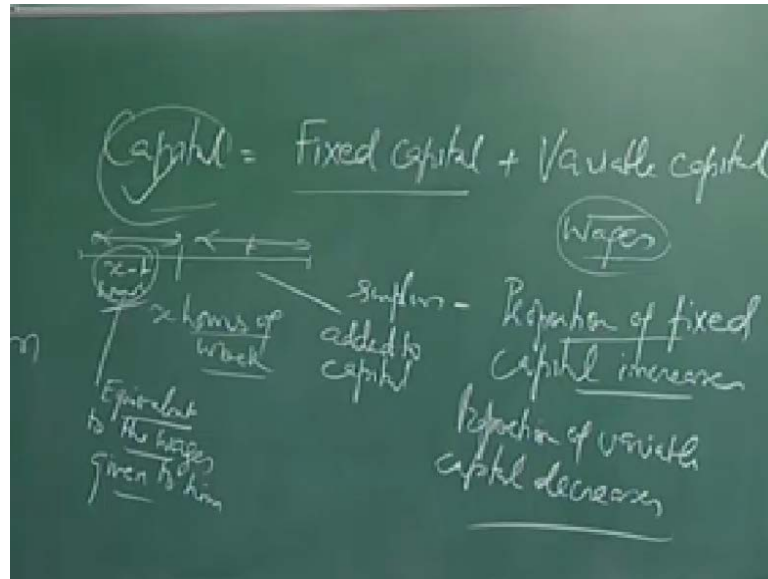
Constant and variable capitals

- To put it in other words, capital consists of two parts: constant capital and variable capital.
- The part of the capital which is represented by the means of production, raw and auxiliary material, and instruments of labour is the constant capital. The part of capital represented by labour power is the variable capital. While the constant capital does not undergo any change of the quantitative value, the variable capital produces its own value and a surplus.
- Accumulation of capital, though originally appearing as its quantitative extension only, results eventually in the change in its composition, under a constant increase of its constant constituent, and a constant decline in variable constituent.

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Since this is the most vital concept in understanding surplus and class relations i would like to explain this by going to book, to put it in other words capitalist consist of 2 parts Constant capital and Variable capital.

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You know capital fixed capital plus variable capital this fixed capital refers to in a simple language money value of all equipment, technology, raw material, land building everything that is needed in the process of production other than the labor power.

And the term variable capital refers to some total of wages which are given to workers when they are hire for productions, fixed capital alone cannot produce anything so if there is no worker to work in the industry then building alone or machines alone or raw material alone cannot do anything. So, it is this workers or variable capital or you know for which workers are given wages when they are combined with fixed capital then only there is some addition to capital.

And why is there addition to capitals? because according to Karl Marx let us say a worker is hired this is illustrative and I am not using exactly the term used by Karl Marx but for explaining his concept of surplus level let me tell you that suppose a worker is hired for x hours of work, this may be 10 hours this may be 12 hours this may be 8 hours.

According to traditions, conventions, laws of society a worker is hired for x hours of work, now in x minus t hours if you broadly divided this total length of working hour into x minus t and t there is some t such that in x minus t hours the worker is contributing to production process which is equivalent to the wages given to him.

See you hire workers for 8 hours then it actually 4 hours only or 5 hours or 6 hours time less than the time for which he is hired he is able to contribute to production process by an amount which is equivalent to wages that are given to him, but he is actually working for x hours. So, in the remaining t hours whatever he contributes that is added to capital that is surplus this is the meaning of surplus and this surplus where does this surplus go this surplus is appropriated by the capitalist class.

So at the end of the production cycle your capital has increased, the fixed capital remains same it does not do anything variable capital produces 2 things a variable capital works for the capitalist class in x minus t hour a worker working to justify his wages.

And in the remaining t hours he is working extra, so imagine that if n number of workers are working then n multiplied by the contribution in this t hours that is the addition to capital so at the end of the production cycle you find that the total capital has increased.

Now, this increase in total capital does not mean proportionate or same proportion of increase in both fixed capital and variable capital. You find that as capital accumulation takes place proportion of fixed capital **proportion of fixed capital** increases **proportion of fixed capital increases**.

And proportion of variable capital decreases, to use Marxist terms when there is a quantitative change in capital, **capital** is expanding so when there is a quantitative change in the capital there is also a qualitative change.

And that qualitative change occurs in terms of proportion that goes to fixed capital and the proportion that goes to variable capital, you know I was remembering that somewhere in 11th years plan government of India writes that in our industry proportion of variable capital is decreasing.

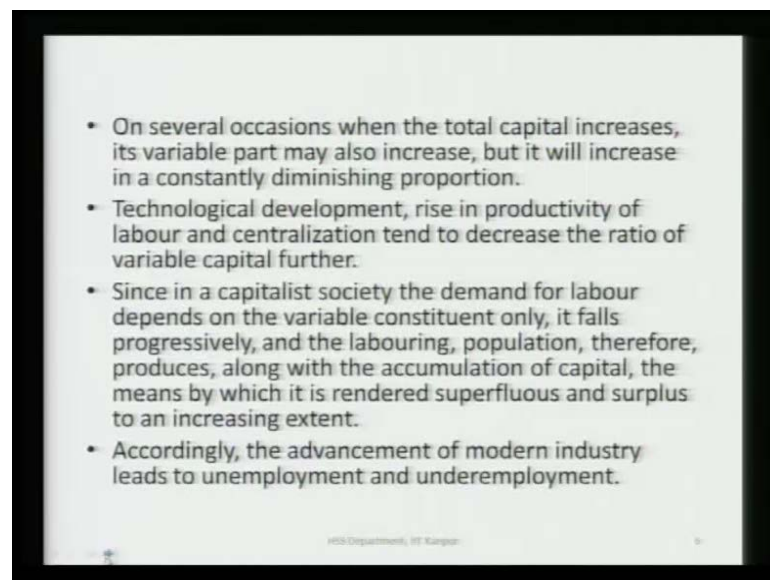
Which means that assets, raw materials, value of raw materials, buildings, technology, equipment has gone up and proportion of capital which is going to workers on formal wages is declining and conditions of working class ultimately depends on this.

So, in this light you can see this that capital consists of two parts constant Capital and Work variable capital the part of the capital which is represented by the means of productions raw and auxiliary material and instruments of labor in the constant capital.

The part of the capital represented by the labor power is the variable capital, while the constant capital does not undergo any change of the quantitative value the variable capital produces its own value plus surplus.

So accumulation of capital though originally appearing as its quantitative extension only results eventually in the change in the composition this is qualitative change, under a constant increase of its constant constituent and a constant decline in variable constituent.

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On several occasion when the total capital increases its variable part may also increase so there may be times in capitalist society sometimes may be times when the so objective condition or wages of the working class are also rising but that is a temporary phenomena.

So when capital increases sometimes variable capital may also increase, the capitalist may share more of their capital with the workers, raise their wages, minimum wages, perks, benefits, spend more on their education and health.

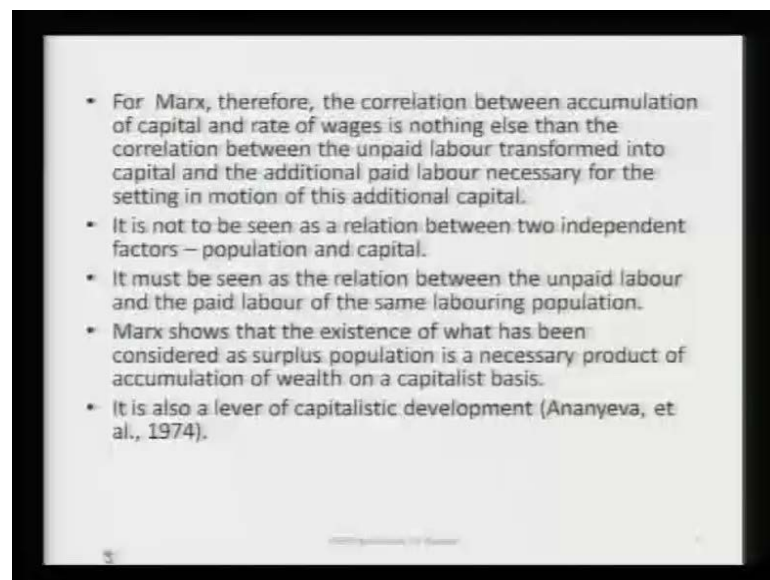
But, it will always increase in a constantly diminishing proportion, so although in absolute terms sometimes variable capital may also rise and the money is spent on welfare of workers and wages may rise in absolute terms, but the proportion of variable capitals in a total capital is always declining or at least that is the long term tendency of

composition of capital, technological development rise in productivity of labor, and centralization tend to decrease the ratio of variable capital further, so with more advanced, more modernization, more technological development, improvement in labor productivity this variable capital component of the total capital decreases at faster rate.

Since in a capitalist society the demand for labor depends on the variable constituent only it falls progressively and the laboring population therefore produces along with the accumulation of capital the means by which it is rendered superfluous and surplus to an increasing extent.

So with accumulation of capital in capitalist society when workers are producing more contributing more to capital they are also creating conditions in which they will be superfluous and surplus. Accordingly their advancement of modern industry leads to unemployment and underemployment, for Marx therefore the correlation between accumulation of capital and rate of wages is nothing else than the correlation between the unpaid labor transformed into capital and the additional paid labor necessary for the setting in motion of this additional capital.

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Actually when somebody like Malthus says that growth of population will have definitely adverse consequences on welfare, it is treating as though population and development are two independent variables.

According to Karl Marx they are not independent, development is symbolized by this part and condition of workers are symbolized by this part variable capital, and the relationship between the 2 is the relationship between that part of worker's contribution which is not paid and that part which is paid for.

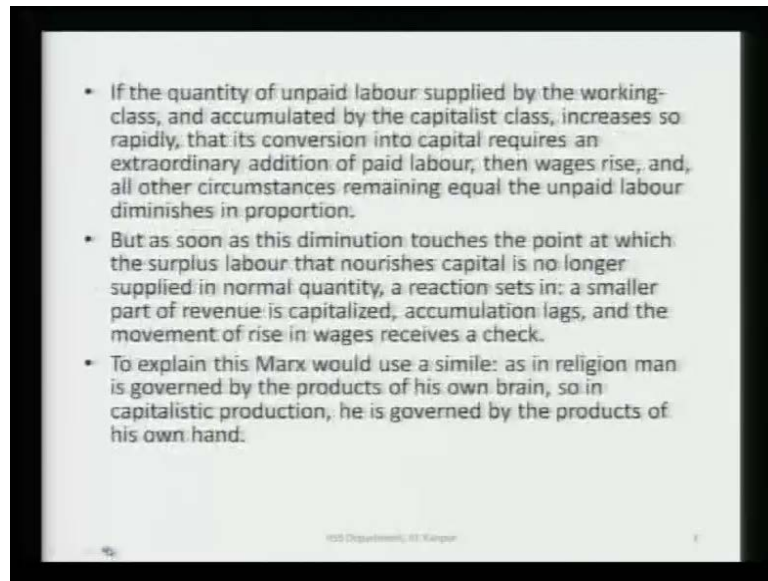
So it is a relationship between worker's contribution only, labor's contribution only, unpaid part and paid part it is not to be seen as relationship between two independent factors of population and capital, it must be seen as a relation between the unpaid labor and the paid labor or the same laboring population so development is all about the labor contribution it is all **labor contribution**, and today's fixed capital is also is nothing but yester years unpaid capital expropriated by a class of capitalist and converted into fixed capital.

So, all that we have all the technological advancement today we have in the form of say money, shares, computers, you know air conditioned room whatever technological advancement we see today that is all the result of surplus and expropriation of surplus converted in the into the form of fixed capital otherwise this is all the contributions of workers only, but you can also say that contribution of worker is today in capitalist society making the working population surplus and redundant,

It must be seen as, so the relationship must be seen as that between the unpaid labor, fixed capitalist unpaid labor and variable of capital wages that is the paid labor, Marx shows that the existence of what has been considered as a surplus population is a necessary product of accumulation of wealth on a capitalist basis.

So according to Malthus there is a natural law according to which population keeps on increasing and wherever there is more development population will rise faster, and that is the cause of surplus population, but according to Marx it is the workers contributions to development which has only made the workers surplus or unemployed or redundant, it is also a lever of capitalist development.

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If the quantity of unpaid labor supplied by the working class and accumulated by the capitalist class increases so rapidly that its conversions into capital requires an extraordinary addition of paid labor then wages rise and all other circumstances remaining equal the unpaid labor diminishes in proportion.

But as soon as this diminution touches the point at which the surplus labor that nourishes capital is no longer supplied in normal quantity, a reaction sets in a smaller part of revenue is capitalized accumulation lags and the movement of rise in wages receives a check.

To explain this Marx would use a simile as in religion man is governed by the products of his own brain so in capitalist production he is governed by the products of his own hand, very powerful statement which can create controversies in this very class itself you know according to Marx religion is a product of man's own brain.

You know all books all (()) everything has been produced by man, you know there's nothing like divine and if I ask you do you think that the religious ideas or ideas produced by men if I do not give any other background I just ask you do you think that religious ideas are ideas produced by men, now all of you will agree yes but when I say that will you say that we rather also produced by men then may be hurt Hindu sensibility, many Hindus will be offended, then if I tell that if all ideas are produced by man do you think that the ides written in the holy Qurans are also produced by men, then for Muslim

students can be quite offensive, similarly for or for bible, Now, Marx says that all age and religion now what have man done, man has produced religion, but man have become victim of religion, today you see around so much of conflict, communal tensions, wars and so much of misery in the name of religion, fights and also so much of restrict on life so much of that kind of discipline sometimes absurd irrational the discipline the torch sometimes people torture themselves in the name of religion, long fasting in some religion there is a virtue if long fast, there are religion we say that if you fast so long for 10 days, 15 days, 2 months, 3 months that ultimately you die of fast then your soul is liberated.

So, this is what religion has done; now religion which is a product of man only is killing man today, likewise in capitalist society the fixed capital which or technology or the advancement, prosperity a machines tools which are product of labor only they are today Karl Marx used the term mister capital for that.

Today mister capital is telling the workers that we do not need you, you are surplus you are more than you are needed.

So in banks computerization of bank will say we do not require so many workers.

I have a doubt (()) or the unpaid wages of the labors or the workers are accumulated by the capitalist in the form of this fixed capital

Fixed capital.

Technology, actually this argument is at against development actually if you follow now how I do not know he Is living in the 18 19 century see you can that he is against development technologies kind of (()) now suppose if a country is a developed and suppose if I am a capital, I am a businessman so have kind a this kind of it is means that utilizing or what is exploiting the worker this kind of argument I think I do not know .

Yes, I understand your angle actually what Karl Marx is saying this is true that if nobody ever exploited workers, imagine a situation in history in which a worker will never exploited, then it means there be no fixed capitals if a worker is never exploited with there is no class of people in a classless society (()) amount of expropriation of surplus would be necessary, otherwise there would be no fixed capital no development.

But what is of interest to Marx is that this surplus can be put to use of all or of the profit or benefit of the capitalist class only, actually according to Karl Marx that is why Marx said that bourgeois played a revolutionary role in society.

At one time from feudal to capitalist mode of production bourgeois played a revolutionary role, if bourgeois did not exist or did not exploit the workers then so much of modernization economic development would not occur.

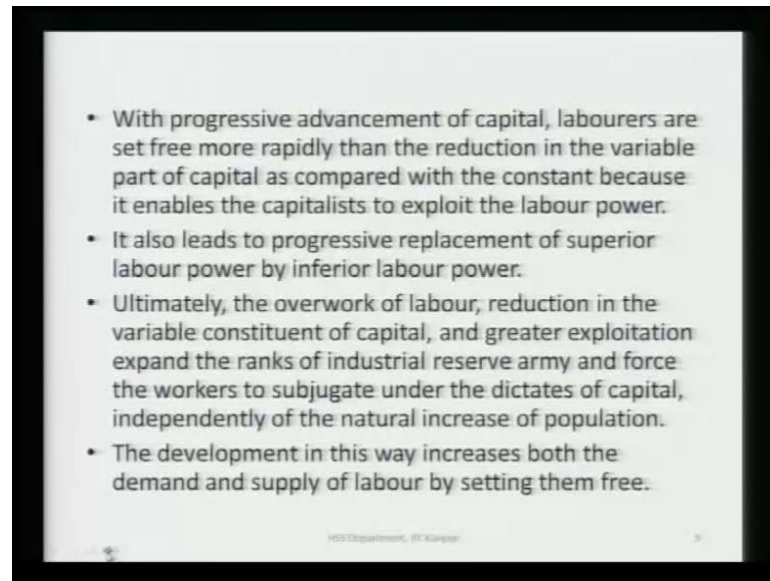
What Marx is saying that tomorrow in the socialist society the surplus whatever surplus will be created will be used for the benefit of all the class, there will be no class **there will be** some government which on the behalf of the whole society, we will lose the labor power and whatever surplus is generated that surplus will be used for the benefit of the whole mankind, it is not that only capitalist class will grow or owners of means and productions will become richer and richer and the condition of working class becomes pathetic more and more pathetic on they become pauperized dependent alienated, and gap between the rich and the poor keeps on widening Marx is against that, but yes we are right that if there is **if there is if there is** no surplus it is like all that income that we generate in a in an economy in some year if the total income is consumed.

It will be like he is against entrepreneurship

Ah he's in favor of entrepreneurship, but that entrepreneurship will exist on behalf of society, there will be no private ownership, this is true that whatever our gross domestic product is if we consume the whole of that and there can be very good reason to consume whole of that in our country in which 28 percent of population is living below the poverty.

Somebody can say there is no point of saving and investing, first satisfy the consumer needs for all people, but then it will **(())** that our income level will remain same and due to rise in population per capita income will decline. Karl Marx is not imagining that kind of situation in which there will be no surplus but he is saying that once the means of productions are collectivize then there will be no particular class a small number of owners of means of productions who will be exploiting others some amount from the labor power will be saved for the development of the whole society, that is what equality will mean so with progressive advancement of capital laborers are set free

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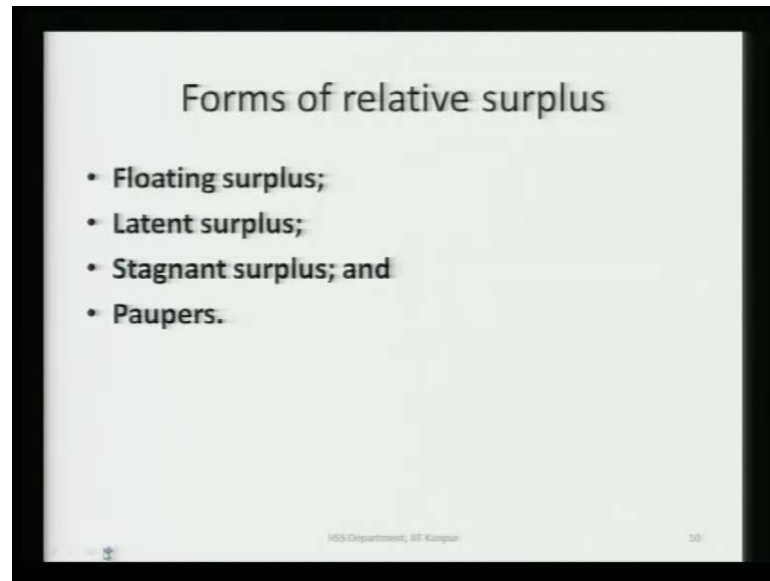


more rapidly than the reduction in the variable part of capital as compared with the constant because it enables the capitalist to exploit the labor power.

It also leads to progressive replacement of superior labor power by inferior labor power, routine, kind of things for which you do not require skill labor power, can be given to unskilled people, can be given to children, can be given to old people, can be given to women without much skill and so as development takes place, this is another reason why the adult workers or the labor powers will face problems, ultimately the over work of labor reduction in the valuable constituent of capital and greater exploitation expands the ranks of industrial reserve army means number of unemployed people.

And force the worker to subjugate under the dictates of capital, independently of the natural increase of population, the development in this way increases both the demand and supply of labor by setting them free.

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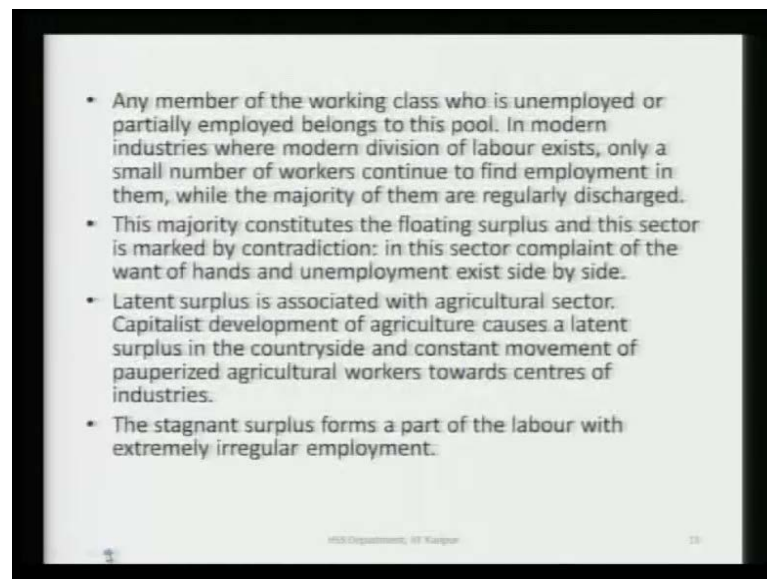


So, Marx is saying that because of this the phrase in the capitalist the iron law of capitalist accumulation, so under iron law of capitalist accumulation there will be growth of capital but then growth of capital will be bad for the condition of the working class, that will be good only for the condition of for the profit or condition of the owners of means of productions, but that will not raise the overall standards of workers and you will find unemployment, this unemployment so unemployment is another term for surplus level. Now, there are four types of unemployed people or four types of surplus population floating surplus, latent surplus, stagnant surplus and paupers. You know if you apply this Marxist theory of development to Indian society it can very well explain on the one hand our society is growing you know initially at one percentage than the rate of growth of income increase further, 11th 5 year plan notice that 10th five year plan specially the last 4 years of 10th 5 years plan produce the maximum rate of growth of income and at the same time you find that that inequality between states, inequality between different social groups, inequality between urban and rural areas that is also widening so the condition of the workers and specially the conditions of schedule tribe and in certain backward regions of the country and become worse in several senses.

The plan itself says the condition of women deteriorated due to structural process of development. So, development of the country and the backwardness of the working in classes at least certain sections of the working classes are existing side by side.

Now the floating surplus related these are the forms of surplus.

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Any member of the working class who is unemployed or partially unemployed belongs to this pool, in modern industries where modern division of labor exist only a small number of workers continue to find employment in them while the majority in them are regularly discharged.

The other day I was telling that for many of you it may be shocking information, but the total proportion of workers in Indian economy which is in organized sector and having regular employment is only 8 percent what kind of development is taking place. And a large number of people which in census are recorded as marginal workers and a large number of people working as self employed or in unorganized sector or a contractual labor in organized sector they all are part of the surplus labor.

There is surplus labor in urban areas, there is surplus labor in rural areas and surplus in urban areas which is related to industrialization and in industry due to constant hiring and firing of workers that kind of surplus is called this floating surplus.

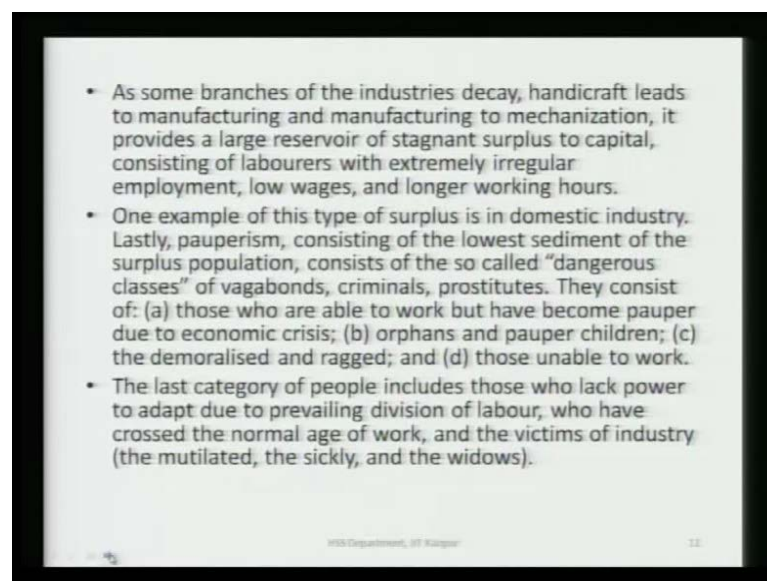
People keep on moving from one place to another, from one occupation to another they keep on trying their luck, and interestingly then in centers of industry on the 1 hand there will be so much of unemployment and on the other hand there is always a complain of shortage of good quality workers. In India also there in every sector in civil services, in

academics, in banking everywhere we say that we are not getting good quality of people and at the same time there is so much of unemployment.

This kind of contradiction more confined to urban areas and industry and for this kind of thing, so this type of surplus or unemployed population in industry for this Marx says a definite name this is the floating surplus, because they keep on floating from one occupation to another, one industry to another then there is latent surplus which is associated agriculture sector capitalist development of agriculture causes a latent surplus in the country side it is latent it is hidden latent means it is hidden and only then there are opportunities in neighboring urban areas or when new centers of industries or manufacturing or service come up then immediately you find that lot of people are migrating from rural to urban area they are the latent surplus in agricultural sector.

Then there is stagnant surplus which is part of the labor with extremely irregular employment.

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As some branches of industry decay handicrafts leads to manufacturing and manufacturing to mechanization it provides a large reservoir of stagnant surplus to capital consisting of laborers with extremely irregular employment low wages and longer working hours this is standard surplus.

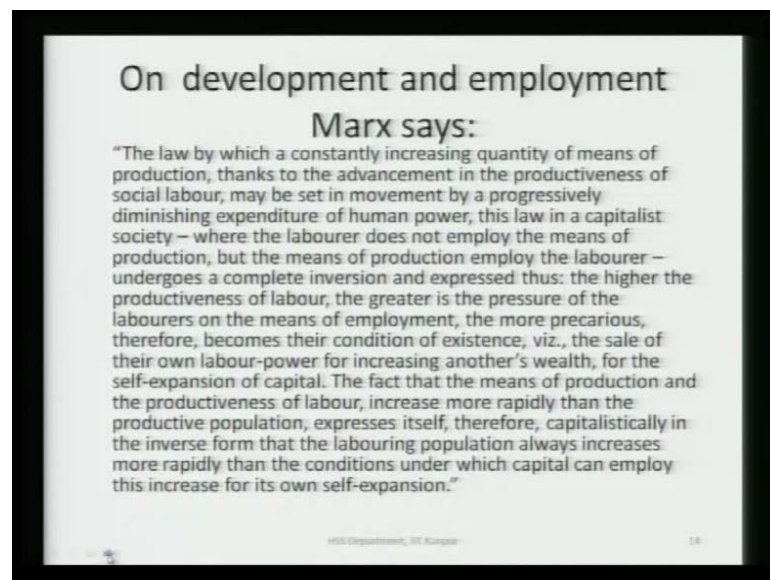
One example of this type of surplus is in domestic industry, lastly pauperism consisting of the lowest sediment of the surplus population consists of the so called dangerous classes of vagabonds, criminals, prostitutes and they consist of those who are able to work but have become pauper due to economic crisis, recession or this thing can included here orphans and pauper children the demoralized and ragged and those unable to work.

The last category of people includes those who lack power to adapt due to prevailing division of labor who have crossed the normal age of work and the victims of industry the mutilated the sickly the widows.

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So to Marx pauperism is the hospital, very strong words the hospital of the active labor army and the dead weight of the industrial reserve army.

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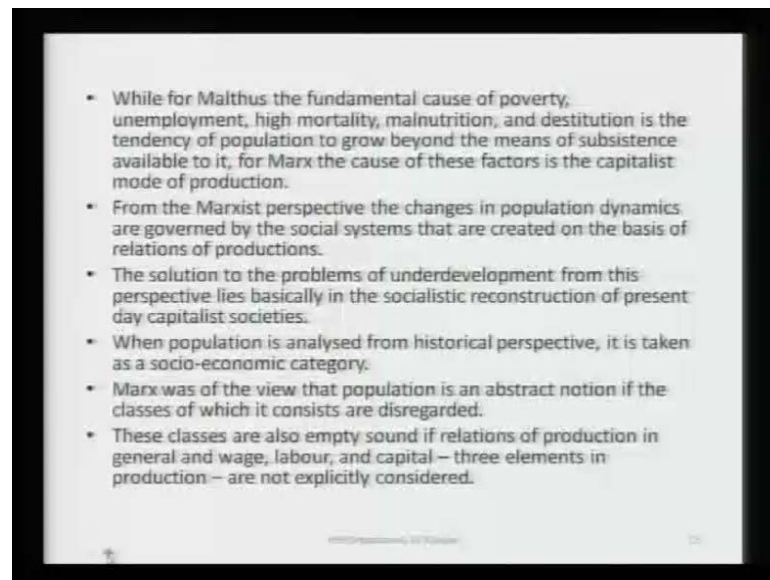
On development and employment Marx says; that the law this is a quote from Marx to quote the law by which a constantly increasing quantity of means of production thanks to the advancement in productiveness of social labor may be set in movement by a progressively diminishing expenditure of human power, this law in a capitalist society where the laborer does not employ the means of production but the means of production

employ the laborer undergoes a complete inversion and expressed thus the higher the productiveness of laborer the greater is the pressure of the laborers on the means of employment, the more precarious therefore becomes the condition of existence viz the scale of their own labor power for increasing another's wealth for the self expansion of capital the fact that means of production and the productiveness of the level increase more rapidly than the productive population express itself therefore capitalistically in the inverse form that the laboring population always increases more rapidly than the conditions under which capital can employ this increase for its own self expansion.

Now if you read original writings of Marx then Marx says that commenting on Malthusian theory of population that Malthus did not have anything to say as fresh it is all plagiarism copied from here and there and whatever sensation is they cause that was only because they serve the interest of bourgeois otherwise there is nothing in Malthusian theory of population. I think this is what (()) Marxist theory of population is.

I can spend some more time on this or

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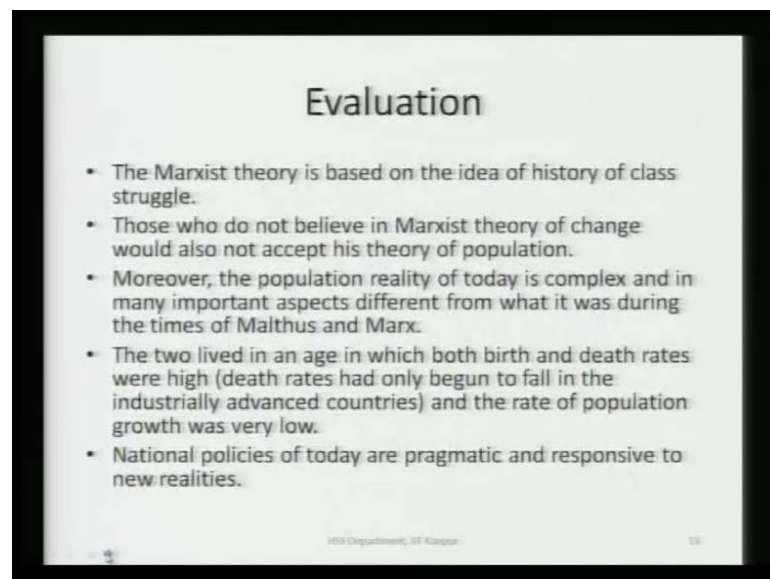


let me finish 1 or two slides and then the way you can ask some question. While for Malthus the fundamental cause of poverty unemployment high mortality malnutrition and destitution is the tendency of population to grow beyond the means of subsistence for Marx the cause of these factors is the capitalist mode of production that is a big difference.

For Malthus there is a natural law of pauperism because today you have poverty and destitution for Marx this is iron law of capitalist accumulation, from the Marxist perspective the changes in population dynamics are governed by the social systems that are created on the basis of relations of productions, the solution to the problems of underdevelopment from this perspective lies basically in the socialist reconstruction of present the capitalist society, without socialist reconstruction of present day capitalist society you cannot solve the problem of unemployment this is Marx thought, and then population is analyzed from the historical perspective it is taken as a socio economic category, Marx was at the view that population is an abstract notion if the classes of which it is consist are disregarded.

These classes are also empty sound if relations of production in general and wage labor and capital 3 elements in production are not explicitly considered.

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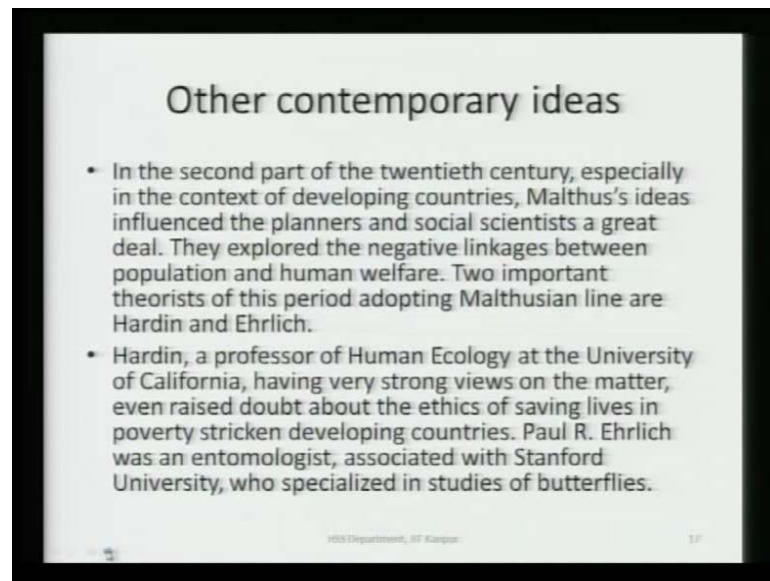
Now, when we look at the Marxist theory one may say that the Marxist theory is based on the idea of history of class struggle those who do not believe in Marxist theory of change would also not accept his theory of population.

Moreover the population reality of today is complex and in many important aspects differs from what was the situation in the times of Malthus and Marx. The two lived in an age in which both birth and the death rates were high, death rates had only begun to

fall in the industrially advanced countries and the rate of population growth was very low.

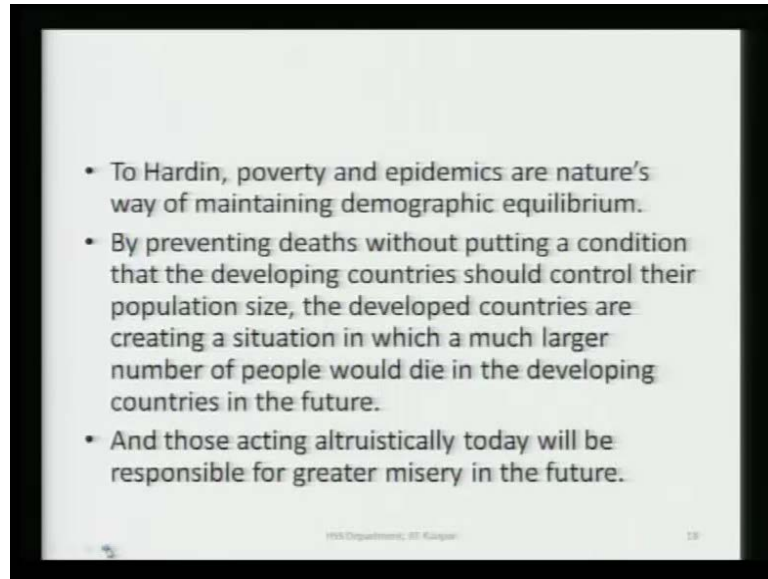
National policies of today are pragmatic and responsive to new realities where death rates have fallen, birth rates are high or moderate and population is growing fast.

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In the second part of the 20th century especially in the context of developing countries Malthus's ideas influenced the planners and social scientists a great deal, they explore the negative linkage between population and human welfare and among them harden a professor of human ecology at the university of California he has very strong views on the matter and then Paul Eldritch the author of Population bomb you know

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There have something very significant to say harden must be seen more Malthusian than Malthus was to hurt in poverty and epidemics are nature's way of maintaining demographic equilibrium.

Hardin was against that developed countries giving any relief to developing countries at the time of earthquakes or famine he says that you know the problem is that suppose there is a he talks about Ethiopia suppose there is some country facing high mortality or starvation death because of epidemics or because of drought by giving them food grains or money you think that you are helping them, but you forget this is harden **harden** is saying I am not saying harden is saying that you forget to actually in this socio economic milieu only a small size of population could survive, because they have gone beyond their size so they are facing the problems of floods and famines and they are dying you stop their deaths by giving money and food grace what will be the result your population will explode further.

And when the means of conditions means of subsistence for them in their natural surroundings, in natural environment, in their socio economic culture and condition only a small number of people could survive and you are giving them aids so that more people survive, and in the mean time they produce children and the size of population is growing up so what will happen tomorrow again there will be epidemics and tomorrow again there will be floods and famines and starvations and many more people will die,

that means all those who are admired for saving say 5000 lives in some country today are responsible for 50000 death tomorrow. So, harden was saying that if people of less developed countries are dying, let them die you are not helping them you are saving 5000 lives today you are not realizing that by saving 5000 lives today, you are creating a condition in which 50000 people are likely to die tomorrow.

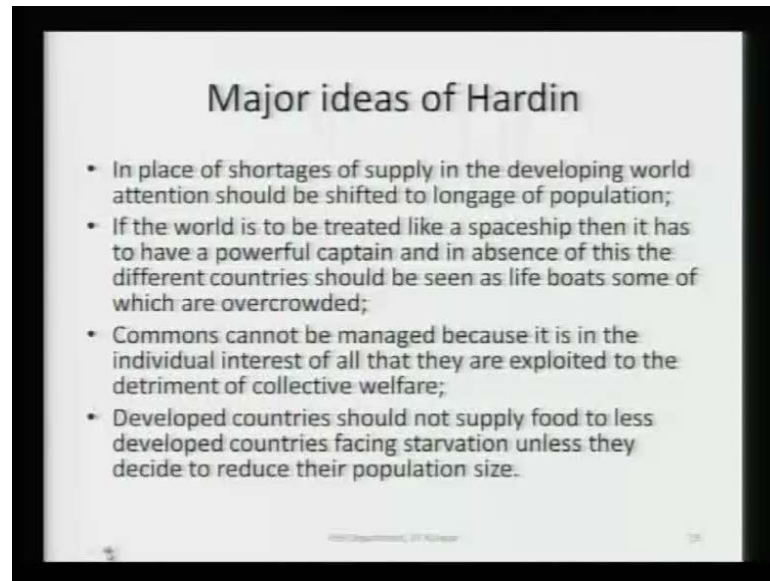
What is said to some extent it makes sense also that if you help some other country in starvation or epidemics or shortage of food grains you can also put a condition that they will go for family planning programme, so both the thing welfare and unlimited growth of population cannot go together this is what harden said, it is very interesting to read harden though he has very strong views on aid and migration.

He said either you let them die, or if you give them aid or you also tell you also convince them that they must limit their population size not only birth rate but population size so a country which reduces its birth rate does not necessarily limit its population size decline in birth rate do not immediately results in stoppage of growth of population that takes time, reduction in total fertility rate today will result in decline birth rate only after 10 or 15 years because birth rate depends on age distribution of population also, harden says that there must be a programme for population, not for not only family planning programme you must have population programmes in which you tell your countries which you are helping they must limit their population size.

So, by preventing deaths without putting a condition that the developing countries should control their population size, the developed countries are creating a situation in which a much larger number of people would die in the developing countries in the future.

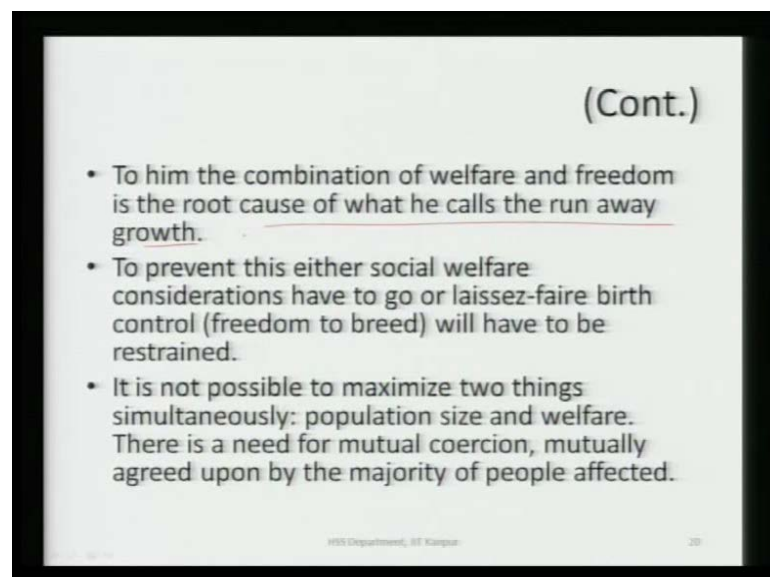
Is this kind of help virtuous or (()) and those acting altruistically today will be responsible for greater misery in those countries in the future, if they do not reduce their birth rate if they continue to expand their population despite epidemics, despite draughts of floods and famines.

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According to harden in place of shortage supply in the developing countries attention should be shifted to long age of population, he made a new he did not quarrelling but for all practical purposes in population literature he only gives the concept of long age of population, nobody was using this term long age he said in place of saying that they have shortage of supply you say that you have long age of population, and if the world is to be treated like a spaceship then it has to have a powerful captain and in absence of this different countries should seen as life boats some of which are overcrowded, commons man idea of commons what should developed countries do and so

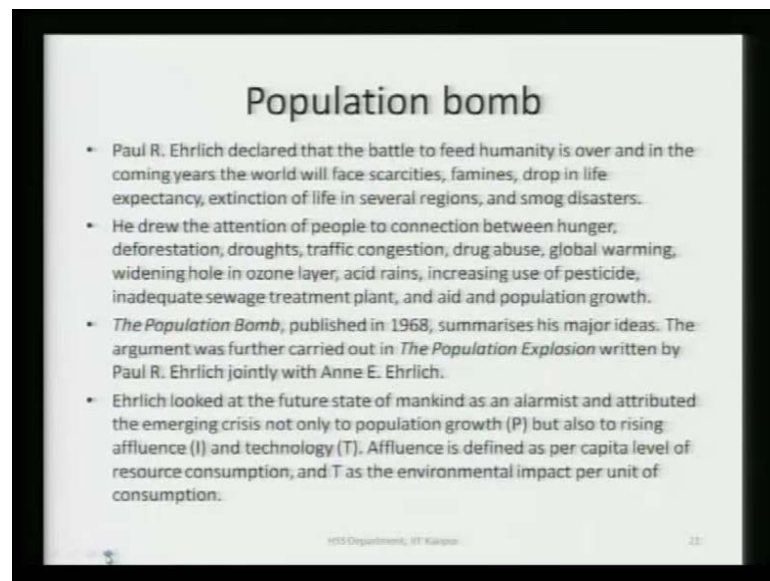
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To him the combination of welfare and freedom is the root cause of what he calls the runaway growth, to prevent this either social welfare considerations have to go or laissez faire birth control which is freedom to breed will have to be restrained.

It is not possible to maximize the two things simultaneously population size and welfare there is a need for mutual coercion, mutually agreed upon by the majority of people.

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So, these are some then there is the idea of population bomb in the year 1968 had Paul Eldritch wrote his book the Population Bomb and he said that in less developed countries the kind of bomb is exploding population bomb whose consequences are much more pathetic, much more painful than the consequences of atom bomb.

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The slide features the equation $I = PAT$ at the top, with the 'I' circled in red. Below the equation are two bullet points:

- Using the equation $I = PAT$, he showed that the environmental impact is the product of population size, affluence and technology.
- It may be noted that unlike neo-Malthusians of England, Hardin and Ehrlich give more importance to population control (i.e., reduction in population size) rather than birth control which focuses on reduction in fertility levels only and aims to reduce population growth rate.

At the bottom of the slide, there is a small text 'HSS Department, WU Kungsho' and a page number '22'.

And he also said that not only population growth for total impact on environment there are 3 things population is one thing then income and the environmentally impact based on per unit of income so there are 3 things population growth, development and environmental impact.

There are 3 things which are affecting the total quality of environment and you have to make a conscious attempt to control environmental degradation or total impact on environment or nature separately at these 3 levels.

So, actually when 50s and 60s, population started exploding in less developed countries then ideas of mass became less powerful, but in some country like China, Mao and in writing of Lenin and Stalin you find a very strong support of Marxist theory.

Ultimately today the experience shows that all countries are going by practical considerations, so Marxist like China has gone for one child policy in a way China acknowledges the importance of writings of Malthus or harden or Paul Eldritch when it goes for one child policy.

In U S S R also there are U S S R problem was more complex in European part of U S S R population was almost stabilized, in Asian part or Muslim part of U S S R there were rapid growth of population.

So, in as with S Y soviet Russia finally they went for what they called regionally differentiate population policy something which is not congress with Marxist theory of society or Lenin's Stalin's theory of population they recognize there are regional differences so ultimately all theories of population have become more practical, they are neither following Malthus theory nor Marx's I think although I have lot more slides but I would like to see whether I am communicating what I wanted to communicate may be you can ask 1 or 2 question or if you need some clarification.

Karl Marx is getting very critical of this person that is Malthus according to him there is no natural law of.

Yes yes

But then according to Marx the solution is the of society population growth and reality are very much related so if we show that problem we can.

Yes

But at the same time Malthus say that unless and until there is a vice or a check population will be nothing geometrical ratio or something but after relation I do not know relating the Marx's viewpoint of population growth there is no direct he did not mention any direct solution or what is called suggestion how to tackle he correlated the population growth the structure of the society that is this kind of class or the bourgeois or because of the bourgeois they are accumulating the unfair level but unlike Malthus, Malthus solution of something there is no some vague vague or something not giving any direct solution of subject how to track he called it the development or class s tructure of class struggle or

Yeah according to Malthus it is natural that whenever development is occurred population growth will also occur and a population growth is not rested then population can grow faster than development and that means the development will followed by some kind under development of poverty.

It is necessary to control the size of population for development to sustain, but according to Karl Marx the cause of poverty is not the excessive growth of population because population is not an independent variable.

Why do we say that population is more than it should have been because you see misery, unemployment, high infant mortality, high maternal mortality around you poverty and unemployment, and when you analyze the causes of these factors then you find that the causes of these are not the excessive growth of population but the faulty relations of production. Inequality, **inequality** in distribution of wealth, inequality with respect to ownership of means of production, concentration of wealth and power at one place and therefore; you cannot solve the problem of working classes or problem of mankind of poverty or unemployment and these things.

Simply by going for family planning or by restricting size of population, it is possible that the size of population is less, and even then there is misery. there are many countries where density of population is low, and they are also facing the problem of unemployment, poverty, misery, high mortality. And the problem is actually more of the faulty mode of production or unequal distribution of wealth.

So, Marx was saying that to solve problems of misery, poverty, unemployment, high death, you have to transform society from capitalist mode of production to socialist mode of production. And these Marxist thinkers Marx and Lenin, they also Engels, Marx, Lenin, they also emphasize that ok; if a socialist society will ever need to control its size. Then they can do so, and a socialist country will be more effective in regulating population size than a capitalist country. So, that also they said.