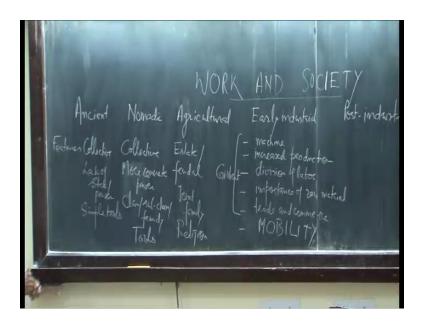
Introductory Sociology Prof. A.K. Sharma Department of Humanities and Social Sciences Indian Institute of Technology, Bombay

Lecture - 13 Sociology of work-III: Development and work

(Refer Slide Time: 00:33)



Well friends, today we will spend again sometime on work and society. As sociologists we are interested in work, in connection with other institutions of society. So as in study of other facts of society, in work also sociologists are expected to look at how has work changed or as society world in different stages of evolution, what was the meaning of work, and how did work affect other aspects of society. To address this question, you know I have written something on the board to organize the lecture better, that broadly speaking although it is very difficult for us to say what are exactly the stages through which, society has passed, and different sociologists, different historians have identified different stages, of development of society, and in different theories, they are named differently, they are characterized differently, but in the context of work, it serves our purpose to say that there was an ancient society based on food gathering hunting. We call that society ancient in which work was in the form of food gathering and hunting.

In the last class I was saying that, following Maslow's need hierarchy model. We can say that human beings have the hierarchy of needs, and the need for food, shelter, clothing is basic. And in ancient society, in which men just separated from the animal kingdom, hunting, and food gathering, must have been the predominant form of work, and that means that, the whole banned, or the tribe, or the collectivity, or the group, obviously not much known much is known or can be known about such a society today, except that here and there during the last century or a little before that, in much of 19th century and 20th century. Anthropologist is started going to; the remote parts of Australia, Africa, some Asian, and Latin American societies, ancient primitive backward remote societies were also studied. Eskimos, isolated societies, different societies, societies in the stage of primitive development, and anthropologist assumed that, what was happening in those societies, where economic development was minimal, and association with nature was still very close, so that must have been the characteristic of ancient society.

Assume, there is no way to study, what kind of society existed 5000 years ago, if at all for those countries, for which we have any written information, or as in case of India, oral tradition. In India we did not have the tradition of writing, but we had oral tradition. Actually our vedas were also called Sruthis, Sruthi means which is heard, oral tradition. So anthropologist, by going to knowledgeable persons, situated in oral tradition, tried to in for what kind of system, originally or in the heyday of their philosophies, must have been. While discussing a state, I said that, in ancient society, there was no state, and that means, that there was no, or there was minimal inequality, among people, with respect to power. Either there was no inequality or we can assume that, though there was some inequality, but it was as compared inequality of power or as compared to the nature of formal state, of our times, there was very little inequality among people. That also means inequality between clans, men, women, chiefs, and ordinary members of the tribe, was minimal.

They use simple tools, or no tools, may be their own jaws, their own hands, their own legs, were their tools. Gradually some simple, you know historians divide history of society into several parts, early stone, late stone, metallic this. So gradually people started developing, some tools and techniques, to help them basically in the task of hunting, or gathering food, food was either animal based, or forest based. For animal based they had

to hunt, for forest based, they had to go and pickup fruits, collect forest produce, or dig out roots of certain plants etcetera. Now as society change, people started realizing the importance of energy, and for energy, they looked for animal power. Now animals were not only source of food for them, animals became a source of power, and people started collecting horses, oxes, asses, goats, nomadic stage. Perhaps, if this theory is correct, that the Aryans came from outside, though there is lot of controversy, many people. Now the recent archaeological evidence shows that Aryans did not come from anywhere, Aryans were the original inhabitants of India, but in any research there are lots of ifs and buts, research can never lead to final or full proof, or deterministic conclusions.

If that theory is correct that Aryans came from outside, then Aryans were mostly in the nomadic stage, and they depended on their horsepower ,tribes, or groups, or, warriors, who had good horsepower, and good arms and emanation, could go outside and capture, the country side, the cities, sometimes some of them like Chengiz Khan. At one time he captured, much of what we call Eurasia, a large part of Asia, a large part of Europe, was captured by Chengiz Khan. Nomadic society was evolving into that type of warrior groups, concuss, our august comtes, use the word concuss, to describe one of the stages of evolution. Nomadic society, obviously in that society, there was some power, some distribution of power, and if you read Vedas, then you find, you come across what kind of political familial, social organization, of such people may have been. As a matter of fact, something which happened in Europe, only in an industrial society, early industrial society division of labor, you find that traces of division of labor are present in the Aryan or Vedic society.

Then from nomadic society, or nomadic stage of development, we come to agricultural development, agricultural stage, in agriculture too. And till very recent times, there were two types of agricultural practices in our country; one was shifting cultivation, another was settled agriculture. For a longtime, and till very recent times, in several parts of the country like Odisha, you know so recent that one of our PHD students around 85, made study of how this transition from shifting cultivation, to settled agriculture is taking place in Odisha, and what are its implications for demographic situation for family, for belief systems, for agrarian relations, and for political relations. So some of these things continued till very recent times, shifting cultivation means, slash-and-burn. The tribe will

go to some area, which is not yet cultivated, lots of bushes, forests, lot of natural growth of vegetation is there. They will burn it, slash, and use that land for cultivation, that was called shifting cultivation, or slash-and-burn cultivation, cultivate that land for three years, and when they find that the productivity of the land is declining now, then they will move to another area, and again engage in the same kind of shifting cultivation system, then settled agriculture.

Gradually with developments of tools and techniques, understanding of natural processes, understanding of soil fertility, and sources of irrigation, improved sources of irrigation, watershed, people started settling down in villages. But I am aware of the fact that, it is difficult for us to say exactly in which year this happened. In some countries, like Europe, mostly, unfortunately when we study sociology, we studied text books written by Europeans, and much of the research in sociology and anthropology has been done by European scholars, American scholars, British scholars, who are essentially describing the process of transition in that, part of the country only. Otherwise if we develop our own endogenous, variety of sociology, maybe many of our conclusions will be different. In our country, as such this settled agriculture, and advance agriculture, division of labor, and elaborate political arrangement, they are all found in history, at least 3000 years back. When they read literature of pali, prakrit, Sanskrit, and literature related to Mahavir swami's period. In what kind of social structure Mahavir swami was born.

In what kind of social structure Gautam Buddha was born, what was the arrangement of family, state, you know some. There is one story according to which, when Gautam Buddha saw that is saw an old man, saw a sick person, saw a dead body. Normally in text books it is written that Buddha saw this Buddha saw an old man a sick man, a dead body, and finally a sannyasin, and he ask what is this, and does everyone has to undergo the same cycle of birth, age, old age, and does everyone has to pass through stages of sickness, will everyone die, when these questions started hesitating his mind ,he became Buddha, he left his house, his kingdom, and because somebody had told me that you see this sannyasins. These sannyasins have liberated themselves from transcendence, from transmigration, from the cycles of birth and death. So Buddha was influenced by that, and subsequently he became a monk. But there is another story, that there was a small river,

between Buddha's father's kingdom, and another kingdom, on the other side of the river there was some king, some other small kingdom there.

These were all small kingdoms, you cannot even call them princely states, very small, very small states, not much powerful, but what the story says that, there was an elaborate political and social arrangement, and there was dispute over the use of the water of that river. So one day Gowtham found that there was lot of disturbance, mobility, mobilization of people, mobilization of army, he asked what is happening, and they said that we have to teach a lesson, to the other kingdom, because they are not permitting us, to use water of this river, during the lean period. Buddha said you have fought several times in the past, to no avail, this war will also not yield anything, we should not fight. We should send our representatives to them, let some representatives of ours, and some representatives of theirs meet together, and settle this dispute for all time. But as the tradition says, that people were sort of inciting, the soldiers, and they are chiefs, that no it is the dharma, duty, dharma, religious responsibility of Kshatriyas to fight to set scores through fight, and Buddha was saying that no, war does not solve anything.

We find a later they Gandhi addition in Buddha of that time, peaceful, nonviolent, let us approach nonviolence, but by that time, the council of their kingdom, though it was small, had passed resolution, that we will fight, we are not so weak, as to take what they decide for us .And Buddha oppose, now the problem is that if somebody opposes the decision of the council, it was a great democratic tradition. So here we in this story, and in this literature we find, how elaborate formal, and well structured political arrangements, and social arrangements of that time work. The social arrangements say that, no it is the duty, responsibility of Kshatriyas to fight and to settle scores by fighting, Buddha saying no. There is a hierarchy of power, there is social organization, there is also a formal rule, that if someone opposes, the decision of the council, democratic decision of the council, then he and his family will have to forfeit everything. All their land, money, possessions, property will be taken away by the society by the council.

So now Buddha is opposing, which means, that if Buddha opposes, then the kingdom power, property, land, gold, metals, whatever Buddha's family, means the king had Suddhodan, whatever Suddhodan had, that will be taken by the council, and if suppose,

because of good natured tradition religion, or whatever, if the decision is not implemented in this way, then the Magadh, king of Magadh, a bigger kingdom, much bigger monarch, Magadh kingdom, monarch. Then the monarch can take away everything belonging to their small kingdom, so their small kingdom will be merged into, directly merged into, that will come under direct control of the Magadh. Like Indian states coming under the direct control of the crown British power, so it became a difficult situation, and to overcome this problem, then Buddha decided, that do not do anything to my family, I am just leaving, and this is how Buddha left home, this is another story. We do not know what story, what version is correct, but this story tells us so many things about society of that time, that according to a dominant, Hindu values of the time ,or elaborate religious, Religious socio or socio religious organization, or political organization.

There was a monarch, and under monarch several small kings, below them chiefs of army, of their own kingdoms, and elaborate hierarchy of power. Then social organization. Then norms, and norms govern behavior of all people, all sections of society, and norms were quite powerful, even Buddha's father, who was some sort of king, did not have power not to avoid by the decision of council. It was not the situation of the type we have today, that faculty federations of IIT Kanpur, other IIT's decide in one way, and the minister of education decides in another way, and finally the decision of the minister prevails. In those days society was so powerful, that the king had to work under the direction of society. You may call it direction of Brahmins, or you call it the power of the norms of society, but that was the kind of society. Then we come to early industrialism, and sociology is much concerned about this, because this is a kind of dark period, not much is known about ancient, nomadic, agriculture, except that. Agriculture we know more, because it is not so old, but about nomadic and ancient, except projections done on the...

Projections are guesses, guesstimates done on the basis of studies, of nomadic and hunting food gathering societies in 19th and 20th centuries, we do not know much about them. Now what is industrialization, what is industrialism, although we all use this term industrial, industrialization, industrializing, post-industrial, advance industrial, heavily industrialize, lowly industrialize, common people use certain industries, a term that a

common household term everywhere today. But to have a conceptual understanding of industrialization, I think these 5 points or 5 features given by Gisbert are quite useful. Gisbert says that there are 5 characteristics of early industrial society; one use of machines. In agriculture nomadic ancient society, there was no machine, there were some tools and techniques of production, simple, but now you have a more advanced machine, machine production, mechanization. Early industrialism was about mechanization, mechanization in manufacturing sector, and gradually moving towards mechanization of agriculture.

In industrial society subsequently, even agriculture was mechanized, machine and use of machine, leads to increased production, output, national income, gross domestic product, means money value of all goods and services produced in the economy in a year's time, increases at a very fast rate, increased production. More production than we need. This more production than we need, would also mean that we have something extra, surplus. I will explain the concept of surplus, in the next lecture, more with the help of the Marxist framework, so we will have surplus, industrial society will produce surplus. Here there is no surplus, very little of surplus, very little of storage facility, hand to mouth, people remain hand to mouth, and at most they can store things up to the next agricultural season, division of labor. This early industrial society is also marked by division of labor. The division of labor appears in the form of specialization, into different economic activities, shipping, textile, medicine. And in those industries, we have an elaborate arrangement of people workers, starting from manual laborer, manual labor then some kind of supervisors, then some kind of managers, then some kind of owners.

In between Gisbert says that between agriculture and early industrial society, there was also a guild system, and there were two types of guilds; trader's guilds, and artisans, crafts guilds. A guild is a group of people who engages in the similar type of craft, or trading activities. The guild would include, the chief or the senior most person of the guild, or one who arranges for tools and money, or the most experience craftsmen, who is some kind of leader manger, and all others going down, up to new recruits or apprentices, from apprentices to the master, where is again a complex arrangement, but these guilds, were the dominant form of economic organizations in the transition, from agriculture to early industrialization. Karl Marx has given lot of importance to this transition, through

traders and craftsmen. According to Karl Marx, today in capitalist society burjuvazi is playing a negative role, but at one time the burjuvazi or business men or traders, or those who ran their economic enterprise, to make profits, revolutionize the agricultural, or revolutionize the economic production.

They were seen, they must be seen as revolutionaries, in this system, producing this kind of arrangement, but now their interest lies in maintaining this system, while the interest of the working classes, or socialists lies in transforming this system. In this early industrialism, division of labor, also means lots of conflicts. We will come to this point a little later. Industrialization increases the importance of raw material. In agricultural society, or in guilds, or in ancient society obviously, not much value was attached to natural resources, raw materials; like iron ore or sulphur or other types of metals, or coal. These things were as valueless as land and water, but now with early industrialism, growing production, mechanization possibility of producing at a very fast rate, increase production, increasing scale of production so fast, that it is possible to turn an increased amount of raw materials, into producers goods, and consumers goods, things which carry utility for producers, and consumers at a very fast rate, so importance of raw material, pricing of raw material.

And then trade and commerce, with industrialization when you produce so much, then you have to sell somewhere, and because you have to sell somewhere, so you develop more trade and commerce. These are 5 features of early industrialism. Now all these feature, I would say increase mobility in the industrial society. This mobility is a key concept to understand, what kind of changes, must have occurred in a state, in family, in education, in arts and crafts in philosophies, in religion, because there was surplus, and because there was mobility. So, a new type of institutional arrangement wants to happen in society. Here you do not have religion, here again there is no religion or there are more of local magical practices, politesse, people worshipping plants, animals, stones, rivers, or imagining presence of some spirits, in a by the time they come to guild and agriculture, and industrial system not agriculture, by the time they come to guild and agriculture, the hold of Christianity. In agricultural society, hold of Christianity, and by implication if we talk about our own society.

Then in agricultural feudal society, the hold of religion, Hindu religion, or Islam becomes very strong. Before that in sociological language we call little traditions, religion was a localized phenomena, people you go to tribal areas, today also you will find, that people worship some plants, animals, rivers hills, or sun moon, Aryans also worshipped, Vedas are full of. Vedas are nothing but full of prayers towards the natural objects of these types; air, water, sun, moon and they name the natural objects, and later call them Gods. But here now, in agricultural society, and in guild system, the hold of Christianity is very strong, hold of Hinduism or Islam is very strong, family is changing. In early industrial society of this type, there was no family; there were clans, first no family. Then some something like family you call it tribe, or community, or clan or sub-clan. Several African countries on this day also, are divided into clans and sub-clans, like our Gotra, and a belief that those who are born in the same Gotra, are descendants of the same person, and a simple division of society into husbands wives.

Husband and wife was not individualized relationship, some kind of collective marriages prevailed, then when people started getting settled down in, village society. So now they require a more formal, more elaborate, more complex organization, to make a social life secure, stable, orderly. And in this system then a strong extended family, joint family, extended family, horizontally extended, vertically extended family comes into existence. By this time, there is no need for education. You know some, I wonder when sometime I find slogans written on the walls, that illiteracy is like a leprosy, means illiterate persons are like leprosy patients. Now if that is true, then most of our ancestors, till very recent times for all patients of leprosy. There was no need for education, why should that, what is the need for education. In this sense, of knowledge of latter's, they did not require education. They did not have to write anything. They did not have to communicate through a written words or (()) they did not have to type email messages. There was no need for this kind of education, so there was no education.

But now in industrial society, you require education, and those who have education, they tend to occupy better positions in society. In more advanced industrial society, manual labors are of course needed, but for more technical engineering, accounting, management operations, workers have to be trained in special domains of knowledge, so education becomes important. It is not that they also wanted to get educated, but because of religion

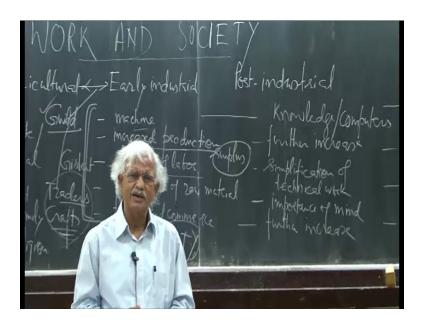
or magic or wrong belief system, or something, they did not educate their children. Education in this form was not needed at all, there was education in their own sand they had education. I remember that a Gandhian scholar Dharampal. And then you look at this phenomena form a different perspective, you find amazing results. Today there is a belief, that in traditional India, education was limited to a certain category of people only, mostly Kshatriyas, and Brahmins. Now Dharampal a noted Gandhian, he reviewed the administrative records, maintained by the British scholars, early British scholars who came to India, and who is started studying Indian social organization, and those record show that education was not absent.

One that education was not absent, but that education was not this kind of secular education that we have today, secular schools, colleges, universities. Education was impacted by religious institutions, temples, churches, wherever churches existed, mosque, and Gurdhuwaras. Gurdhuwaras churches, mosque, temples were the source of imparting education, and Dharampal has also given statistics, some day if somebody finds reading of education interesting, should read Dharampal's work on this matter. Children belonging to all castes and categories, and interestingly when girls went to schools in large numbers, but obviously those schools did not teach complex algebra. Those institutions, those religious institutions gave them, worldly knowledge required at that time and some knowledge of religion, knowledge of moral principles, ethics, philosophies, and some knowledge which is important for survival in this material world.

Now, education is important, and in a education, the notion of education is also changing. all philosophers, who have written on education; think that, education is important for number of things, which also determines the nature of education, education is required, because the educated person has increased capacity, to live happily in this world which means sustenance, or jobs, or work. If specialization is required, then specialization with respect to work, building moral character, for imparting moral ethical principles of society, character building, and for moral development of society, individual as well as society. Education is important for empowerment, for autonomy, for confidence, for self-esteem. When we apply these tests, which were given by philosophers of education sometime back, to education today we find that, none of these functions, is actually performed by education. Education is not building moral character, education is not

giving confidence or self-esteem, education is not empowering, education is not even giving jobs to people. There is lot of unemployment of youths, who are educated men and women, and your planning document themselves, talk about such a phenomenon, but a society changes then everything changes, family will change. Now when mobility is increased, it is not possible to maintain a joint family.

(Refer Slide Time: 42:15)



So in post-industrial society, where then and in more advanced industrial society, again there is a qualitative change, from machine to knowledge, much more increased production, further increase in production, simple or simplification of technical work, in place of raw material again, importance of knowledge, mind knowledge. Here knowledge computer, simple machines are replaced by computers, thinking machines; first generation, second generation, third generation computers. In post-industrial society, we have more dependence on computers, rather than on mechanical kind of thing. Further, increase in production, simplification of technical work. Further, increase in trade and commerce. Here mobility means, that in a society which was so far, stable. Some degree of migration rural to urban migration, migration from agricultural centers, to centers of industry starts, but this stage post-industrial society, is marked by further and qualitative increase in the process of mobility.

It is like somebody comes from; a son of a farmer comes from rural areas, settled down in an urban area, in a sugar mill, in a textile factory, in Baroda, Surat, Ahmedabad, Calcutta jute mill, jute mill of Calcutta, and remains lifelong in Calcutta, working in the same jute mill, till the time he retires or he dies. But today, people are moving from one place to another several times, and from one kind of job to another kind of job, and often from one country to another country, very high speed, very high mobility. So mobility started here, mobility of individuals, before that if there was any mobility, here also there is mobility, but that mobility is collective. Mobility of the whole race, mobility of the whole army group, mobility of the whole banned, tribe, but here mobility becomes individual, and this is the age of very high mobility, hyper. This age is characterized by hyper, hyper division of labor, hyper mobility.

And obviously religion, family, education, entertainment, arts, crafts, philosophies, political system of this society, are not going to be the same as of this, as the socio political familial educational organization of industrial society ,was not same as of ancient society. Likewise changes are taking place in these domains, in post-industrial society. Now, today you have come to a stage, when work has become very sophisticated, but so sophisticated, that it has become simple, and it has been routinized. Like in this stage, in the early stages of development here ,it was thought that software work, computer work, software work is a very sophisticated work, and only technically trained, high quality manpower ,only B Tech's can. In our country 15, 20 years ago, it was thought that software work is great, and this great work can be done by engineering manpower only. This was the division of labor and specialization.

That software work is very creative, innovative, you require high quality of mind, and a technical degree, so only B Tech's from good institutions will be able to work in Infosys, in Wipro, in Satyam, and other smaller companies, dealing in software, but today this division of labor has become so elaborate. So work has been so much divided, division, work has been so much divided, and specialization has gone to that extent, that many software companies today, out of corporate social responsibility, are opening their units in remote villages, and planning that by giving training to illiterate rural women for two three months, they will be able to take software work from them. It is no more a work confined to B Tech's only. Several companies have already started such programs, under

their N G O's, corporate social responsibilities, it have then it have them in increasing profit also, because earlier a software company, if they had to hire people, they had to pay 10 15 years back, they had to pay at least 50,000 rupees per month, to a new recruit, and the new recruit had to be A B Tech from IIT, or regional institutes of engineering, or BHU.

Now with changes in the nature of work, they started recruiting people from all kinds of engineering college. Then started accepting science graduates also, and now a beginning has been made, in which, in software work, illiterate women of Haryana are working, quite efficiently, and the companies do not have to pay them 50,000 rupees a month, they can afford to pay them 2500 rupees per month. The work which was earlier done by a B Tech, can be done by a illiterate women of Haryana, a housewife, a homemaker lady, for 2500 rupees per month, which also means that the salary is to be paid to software workers, which was at 1 time 15 years ago, one of the highest paid work, should also decline. So it is very common, that the young trainees, apprentices, young engineers, managers in established companies, are working for as low as 20,000 rupees per month, and this mobility, and the changing nature of work, obviously has implication for family. A software worker in the early phases, lot of, he had lot of money, but he could not maintain a joint family.

Now see the connection between work and family. His aspirations are high, he is living in Bangalore, he wants to visit malls, he is a consumerist, he wants to buy latest variety of TV, he wants to buy good quality of beds, fridge, refrigerator, and live in a good house, so his expenditures are also more. In the salary that he gets, it is not possible for him to maintain a joint family; it has to be a nuclear family. So sociologist, anthropologist they have said, that nuclear family, is the product of industrialization. Industrialization needs a nuclear family, because industrialization needs workers, who can be hired and fired, and who are willing to move from one place to another mobility. And in this process of mobility, they are either staying alone, as many laborers from UP and Bihar, are living in Mumbai, or they have their own nuclear family, wife and one or two children. They cannot afford to have twelve children, as was the norm earlier in rural areas, they cannot have. In the limited amount of wages or salary that they get, they can maintain only nuclear family.

So work affects what kind of family you have, and today in this age of super specialization, and increasing complexities, and world mobility, and very fast nature of change, throughout your life. You know you cannot rely on what you are learning at IIT Kanpur. Throughout your life, if you want to remain visible, if you want to remain in important position, you will have to upgrade yourself, there will be no time in your life when you can relax, and you can think that now, you will stop learning more. You must be knowing about several of your seniors, they went outside, work for some time, then they found themselves to adequate, went for some MBA degree, or MS degree, or PHD degree, came back to the same industry, or to different industries, and after two three years, again they find that they are inadequate, so they have to work extra, and they have to, have correspondence courses, they have to undergo training, in-house training, or some other degrees diplomas, there are still working, throughout the life they are working, learning, or sometime informally they will have to learn new forms of things, accountancy, management, sales, new knowledge, new computer languages.

When computers started students at IIT's, were taught about fortran four, P L 1. I myself did a course in Fortran 4 and P L 1, and our IIT Kanpur professor Rajaram, he had written a book on fortran four, it was a very popular book, and those who understood fortran four, and P L 1, were supposed to be Dada in computer, but today fortran four and P L 1, will take you nowhere. So you have new languages, more advanced languages, more difficult, more complex things, getting simplified, more complex and more simple. They are more complex for you, but they are simple for those illiterate women of Haryana, who will be using those languages through software's, and packages of course, to apply to software industry, so very complex arrangement, is being worked out. So this is the nature of relation. Now in the next lecture, there are some two three concepts in the field of work, I will talk about those concepts, and I will also give you a glimpse of, how sociologists working in different paradigms, functional, Marxist, look at the nature of work.