

**Course Name- Sociology and Sanitation: An Introduction**

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**Lecture 02**

**Sociology of Sanitation: Definition, Scope and Strategies**

Friends, good morning. Now, we are going to deal with unit 2 that is sociology of sanitation, definition, scope and strategies. I think this is going to be a very significant unit because it will be giving you a broader outline about how we have to deal with the issue of sanitation. I think initially we try to speak about how sociology and sanitation has an inter linkage, but this is basically the unit which is going to define how what we mean by sanitation, what are the various nature and the scope of sanitation in that sense. And that way I think it is going to be providing you the broader what you can say vision about what is the modalities of this course. So, that way I think this is going to be a torch bearer; this unit in that sense is going to be torchbearer for looking to how in this whole course we are trying to deal with the issue of sanitation.

So, I think this is where we try to see that this important the importance of this unit lies and historical perspective which we have discussed earlier was trying to just sensitize you with the issue of sanitation that why or how it is needed. It is basically providing you the rationale that why sanitation has become so relevant in that sense. And now I think we are going to put this sanitation in terms of disciplinary boundaries because initially when we try to speak about that the basic idea was just to sensitize you with the global appeal. But again I think since it has not to be the layman's understanding on sanitation we have to put it what you can say subject specific, domain specific, discipline specific and that is the basic attempt which has been done here.

So, I think let us try to deal with this issue of the issue of sanitation we will have the what we mean by that what are the various definitions which are associated and what is the scope. But before that I think again as a sort of background we have to see that how we can see it in terms of a wider framework and just a background about how we have to start up with this issue. I think the very first thing in that sense which we have to highlight is that there are multiple factors in that sense which are important with regard to the issue of sanitation it includes your poverty, inequality, unequal power relationships and basically when we try to speak about the unequal power relationship I think we have the various developing regions sub-Saharan Africa, south eastern and eastern Asia in that

sense which is basically struggle for the survival and then we have the developing and the developed nations. So, virtually we try to see that it is a unequal power relationship which is equally important and further we have the challenges which are both social and environmental that is going to bring about in terms of urbanization, climate change, increasing agriculture waters, consumptions or the rising pollution level and that is where we try to see that this course in that sense is going to have a meaningful outcome or an appeal because it basically tries to see the completion for available water because somewhere it has been said that the next war which has to be there is on the war on water and this is where we try to see that the lack of safe and portable water inadequate access to the improved sanitation facilities, the poor hygienic conditions in that sense these are certain things which are impoverishing or devastating the health conditions and either it is a rural or the urban we basically try to see that these things are happening. And we have to have certain other arrangements which are to be seen in the fact that how the human development report they try to highlight the lack of sanitation which is killing the population in that sense in Africa and Asia.

We try to speak about that how we have been put for and the practices of toilets are been seen in terms of the open defecation in that sense and there are various programs in that sense which are costing billions of dollars in that sense which are deployed in the developing countries on the issue of sanitation problems. So that way I think this particular program in that sense tries to highlight these sensitive issues in that sense and the people's approach on sanitation which of course, is lacking to some extent there is a lack of education with regard to motivating them for toilets in that sense. So, through this program I think that may be an appeal to sensitize the wider societies directly or indirectly and the ongoing crisis which is been there in that sense I think the millennium development goal which is basically having an appeal of the issue of sanitation in the first half of 2015 and we basically try to see that there is a increased risk of the water related disease and that is where we have to see that one important thing which is parallely threatening and is going to be sensitive is that now we try to see the crisis in social relations which are basically in terms of privatization of the public sphere and that is again a bigger threat in that sense in the era of globalization. So, we try to see that the new liberal era which is marked by the issue of privatization has led the state at the backstage and that is where we have to see that how we have to tackle this particular issue. I think the global trend which Bowman tries to argue is to see it in terms of failure of the state as a means that the individuals has to seek the private remedies and that of course, is not the correct way, but the whole idea in that sense of course, is that the private players are equally come into the picture and the meaning of citizenship in that sense has been emptied with regard to the past.

So, virtually we try to see that there is a shared struggle in that sense, there is a national sense of rights and the responsibilities as citizens and as the aspirant democratic citizens

in that sense that is going to be important. So, I think this aspect of sanitation in that sense has something to do with the delivery of the social citizenship and that is where we try to see that sanitation is basically to be seen in terms of promoting the issue of sanitation. Especially, I think when we try to speak about the survey of people of rural areas in Philippines which try to speak about that what are the ways in which what are the things which they liked with regard to the latrines and I think it is basically a study which has been focused by a current cross in 1992 and what they says about is very interesting that the very first thing in that sense is the lack of smell and flies that of course, is one important aspect. Second is the cleaner surrounding that is another important aspect which they try to highlight in terms of the good practices then the issue of privacy which is equally important and then the less embarrassment where they were the visitors in that sense in a new situation and then finally, the less disease. I think these are certain things in that sense which has been seen as the good practices if you try to have the safe latrines in that sense the sanitation education should be made as the national sanitation policy and that of course, is one important aspect which is going to be an appeal in that sense that sanitation as a right and education has to be given to the people who has to bear with these issues of the poor hygienic conditions and how they have to deal with that is going to be an important challenge and here I think we have to see that how we can understand this issue of sanitation.

I think when we try to speak about the great cities which are badly administered I think in the historical perspective we try to deal with the various scenario in which the developed countries in that sense were also having the struggle over the issue of management of the sanitation. So, we try to see that the greater the cities the more is the problem in terms of the bad administration that is going to be there and we simply try to say that it simply indicates the dirty, unhealthy, unsafe, disgraceful and expensive arrangements for sanitation and that is where we try to see that sanitation is very important index of the socio economic development in any society and as the term implies it is a good water supply, it is a safe disposal of human waste and the waste water and also the solid waste management that is going to be important and the most important aspect of course is the domestic and the personal hygiene. Apart from that we have to speak about the clean housing and many other facilities. I think that is where we try to see that we have to speak about the things and for that I think UNDP in 1998 had spoken about that how they try to define sanitation. Sanitation is basically seen as a safe disposal of solid and liquid waste and maintaining a clean environment which promotes the health and hygiene of the community that of course is the minimum understanding that the safe disposal of the liquid and solid waste is going to be one important aspect and which has a bearing on the health and hygiene of the community and then I think sanitation has to be seen as an integral part of human ecology in terms of surrounding and the safe handling of the excreta in the human environment is going to be important.

It can also be simply labeled as people's approach to take care of their primal needs that of course is the thumb rule and we basically try to see that achieving and maintaining a healthful community environment is going to be an important issue. I think somewhere we try to see that the control of activities which may be adversely affect the environment has to be seen seriously. We have controls which can be achieved through the laws, through the municipal ordinances or regulations and which are very important as such and the extent of these private interest may be required to yield that how the community has to be seen in a constitutional scope with the government having the power what we call as the police power and through that I think the state is going to serve the community which is to be seen as more authentic and authoritative. And here I think according to Reynolds the dictionary meaning of sanitation in that sense is the practical application of the sanitary science through the removal or neutralization of element injurious to health that of course is the basic thing and we can simply say that sanitary engineering is concerned with the construction of works for promoting the health of the community. And here I think we have to see that the community attractiveness from the standpoint of the comfort and enjoyment is going to be more meaningful and we have to see that sanitation it is related to the excreta disposal which means of collecting and disposal of the excreta and the community liquid waste in the hygiene manner which has been implied by World Health Organization in 1987.

So, we have to see that in a very comprehensive term environmental sanitation is concerned with the healthy environment and which has been focused by UNICEF in 1997. So, we basically try to see that it includes the issue of drainage, solid waste management, vector control and the hygiene promotion in addition to the excreta disposal and treatment. I think somewhere we try to see that it is trying to address multifaceted issues in that sense it is not simply the management of the toilets it is beyond that. And that is where we try to see that Tilley Elizabeth while defining in the compendium on this issue was trying to speak about that how the Tilley Elizabeth compendium defines sanitation. And what has been said is that it is a multi step process in which waste are managed from the point of generations to the point of use in terms of ultimate disposal.

And a sanitation system is comprised of the products which travels through the functional group which contains technologies which can be selected according to the context. And a sanitation system also includes the management operation and maintenance. And that is where we try to see that the system functional safety and sustainability is going to be an important issue. And according to the UNICEF the term sanitation refers to the people's demand effective and sustained hygiene and healthy environment for themselves by erecting the barriers which prevents the transmission of the disease is going to be an important issue. So we basically try to see that such an approach in that sense is going to be very meaningful when we try to see in relation to the sustainable development.

We try to speak about the improved sanitation and hygiene behavior which involves the change which is so meaningful that we try to speak about that how the program planning implementation and the resource allocation is going to be important. And we basically try to see that the hygiene behavior programs are not solely upon improving the people's knowledge of hygiene and health but rather it is trying to see building that is to improve the sanitation cannot solve the entire problem. But the whole idea in that sense of course is that we have to see and think beyond. And that is where we try to see that the definition of sanitation in the white paper on basic health sanitation of 2001 refers to. And what it says is that sanitation refers to the principle and practices relating to the collection removal or disposal of human excreta household wastewater and reuse of the impact upon the people and the environment.

So ultimately the good sanitation includes the appropriate health and hygiene awareness and behavior. And we have to see that its affordability and the sustainable sanitation services are going to be seen on priority. And for that I think the definition of sanitation in terms of the recent understanding which has been focused by one storm and what has been said is that how we can speak about the issue of sanitation. And it tries to address to the issue of access to sanitation which be a function in that sense as such and that is going to be important. I think we may not do justice if we are not mentioning one of the action sociologists in that sense who is pioneer in terms of addressing the issue of toilet management and the issue of sanitation that is Professor Bindeshwar Parthak who recently expired.

But his contribution in that sense was a milestone we try to see his contribution in terms of Shulabh International which of course was seen as an important aspect of the issue of sanitation. So according to Bindeshwar Parthak sanitation should be included as a discipline in sociology which he tried to emphasize and because the core problem area embodies the sanitation is related to social deprivation, hygiene, ecology, water, public health, poverty, gender, equality and welfare of the children. So it requires a sociological intervention and also being intervened with the spiritual and philosophical knowledge to him sociology of sanitation can be defined as the sociology of sanitation is a scientific study to solve the problem of society in relation to sanitation, social deprivations, water, public health, hygiene, ecology, environment, poverty, gender, equality and the welfare of children. And that is where he was trying to say that it has an element of philosophical and spiritual knowledge to lead a happy life and to make a difference in the lives of others. I think if we try to see this understanding I think somewhere inspired with his work this particular module which we have discussed I think is going to be a landmark in terms of how his idea of sociology of sanitation has to be put into practice in the field of academia and this is one naive attempt in that sense which is basically representing that how his contribution which was in practices also has to be put in terms of a disciplinary framework.

And we try to see that the United Nations Habitat in 2003 they introduced the term adequate sanitation which went beyond the mere access to the particular sanitation system and they try to speak about the issue of access to sanitation in terms of the convenient for all household members affordable and eliminate the contact with the human excreta. And also the waste water management was seen as one important aspect. So we try to see that the issue of sanitation in that sense which is basically trying to address multifaceted aspect in that sense is going to be important. And we basically try to speak about that it has certain amount of complexities of the issues and also keeping in view the broader understanding of the sanitation. I as a person in that sense I have my own way of looking to the issue of sanitation somewhere inspired by the work of Bindeshwar Pataki.

I am trying to say that how or what I mean by sanitation because my understanding in that sense of course is trying to go beyond and which of course has been indicated initially by Bindeshwar Pataki that we have to see the sociology of sanitation and in that framework I am trying to develop the understanding of sanitation in a more wider way. So according to me that is Ashish Saxena in 2015 what I am trying to make out is that in a broader sense sanitation implies the management, operation and maintenance of the human social ecology involving the greater hygiene and referring to a scientifically derived people's capability to achieve their primal, physical, biological, psychological, social and economic needs and also the entitlement. This is one aspect of the understanding of sanitation. Then further it involves the well-being of individuals through exclusion or neutralization of elements which is both social and physical dysfunctional to them and their community and we have to see that good sanitation is a way of life and an effective tool for the progress of one's mind, body and surrounding in terms of health, scientific temper, secular behavior in an acceptable, affordable and sustainable way. So I think somewhere I try to mean by this definition that sanitation has to have its rooting beyond.

It is not simply handling the issue of pollution or it is not simply handling or making the issue of toilets just trying to overcome the open defecation but I think we have to see it more in terms of the wider societal implications which involves the physical, it also involves the biological but equally important is the philosophical, social and economic needs and entitlements are also to be given. I am trying to basically address to the issue of the changeology in the life pattern what I say in terms of way of life and that is of course we try to see in terms of the enhancement of the quality of life which Amrita Sen was trying to speak about. And it is basically that we try to speak about it in terms of how it is going to lead to the improvement in the surroundings and also to have the scientific temperament or the secularization in that sense is going to be an important aspect. So we have to see sanitation as an overall upliftment of the individual, the group or the

surroundings in that sense or the nation in that sense that is to be seen in terms of sustainability, it has to be seen in terms of equality, it has to be seen in terms of people's capability and it also has to mean something to the enhancement in the quality of life of an individual. And that is where the focus of my definition is trying to give rise to this module in that sense and if you try to see basically we try to say that according to the UNICEF policy the water and sanitation is basically trying to be an important issue and they try to focus on the fact that it is basically seen as a catalyst of better programs and policies, water and sanitation both.

And we require to engage the project implementation and this program in that sense is basically trying to have various issues in terms of having certain amount of collaborative actions which is going to be important and we have to see the owners and the partners with regard to that. So in most of the cases we try to see that the good strategy will be the form to put a core group of sectors of professionals in order to help the nations and that is where we try to see that the policy development process have to take place. Now such a group in that sense will be identified in the current state and then I think they have to be involved with regard to see things in terms of grounded field experiences in that sense they have to be consulted and they have to be the equal partners in the issue of sanitation programs. So we have to see the activities of such joint programs are basically meant for having certain amount of institutional community arrangements in that sense and it is sometimes that we have to speak about that it is something related to the top policy makers, local government initiatives, local management, non-governmental associations in that sense and the involvement of communities in total and that is where we try to see that sanitation has to be seen. Now coming down to next important aspect apart from the definition understanding of sanitation we have to speak about what is the nature of sanitation and for that I think we have to see that the nature of sanitation is concerned with the scientific status of the discipline.

So I think it is not simply technical understanding in that sense it is a scientific status of the discipline if you try to speak about the sociology of sanitation and being a specialized area of sociology I think its nature also should have a bearing closer to the sociology proper or in other words we can say that we have to discuss whether the sanitation is science or not and that of course is the starting point for any discipline and that is where I think sociology was also trying to make out to make the analysis of society as science and this sort of inquiry of truth is based on certain specific assumptions and I think they are the essential elements of the science. Then they are basically the first important thing is the issue of objectivity and we try to see that the nature of sanitation in that sense has to be objectively correct and what we mean by objectivity is that it is a body of knowledge which is to be regarded as science and it has to be objective because if it is going to be seen without the influence of the researcher personal feelings and the bias or the attitude that is going to be the starting point and this objectivity helps the different

researchers to reach to the common conclusion. So the primary duty of the researcher is to strive for the self-eliminating understanding in his judgment and to provide an argument which is true for each individual in their own way. So this is seen as one important aspect to have the objectivity with regard to our understanding. So sociology of sanitation in that sense has to follow the trademark of objectivity which is in practice in sociology as a discipline in that sense.

Second important aspect in that sense is which is again closer to science is the issue of generality. Now when we say generality the whole idea in that sense is that the scientific theories or the laws which we try to discover they are to be seen as surface along the issue of diversity and the thread of uniformity has to be there. So science should not be linked to the individual objects or the individual groups rather its prime aim should be to trace the order in nature and this is where we try to see that the science seeks to have certain common characteristics and the types which are to be put for generalization. So the conclusion arrived should be scientific method should have its application worldwide that of course is another important aspect. The third nature in that sense of sanitation has to be the issue of verifiability and for that the scientific findings are based on the empirical evidences, the speculation and imaginations which have no place in the sciences.

The scientist believes that the real source of knowledge is experiences and that there are no universal and necessary truth from which the valid existential inferences can be drawn. So this sort of a resilience or reliance on reality makes us science more generalized and we have to see that this sort of understanding in that sense of knowledge or information which cannot be verified or tested cannot become a science. So we have to make our things verifiable and it has to be verified by anybody at any space and time in that sense that is going to be more important. And then we have the next important thing that is the issue of rationality and when we say that the science is based on the empirical evidences but it is also based on the rational arguments also. So we have to see that they should be properly organized based on the rational thinking and which can be applied to arrive at the general truth and the scientist does not accept uncritically the things.

So in that sense we try to say that it applies or screws of reasons so as to comprehend its two correctors and in other words the man of science regards the rational ideas as the guiding principles on making predictions that are to be tested by observations. So I think the rationality in that sense is again going to be an important issue and then I think which the science does I think the issue of sanitation also has to deal with this particular aspect which has to speak about the issue of predictability. So this predictability when we try to speak about the whole idea in that sense is that by the logical reasoning and inferences the science has to establish the cause and of the effect relationship and through that it is



believed that the principle of law of uniformity of nature has to be addressed and the basis of these two principles are that the since the predictions about the future state of things is to certain degree of accuracy. So I think that has to be one important outcome in that sense of the nature of sanitation in that sense to have certain amount of predictions that what can be the possible what you can say carrier of the disease, what may the potentiality of specific societies in terms of the futuristic understanding about sanitation, what can be the possible remedial measures in that sense. All these things in that sense are going to be part of the predictions and then I think we try to speak about the issue of system and this issue of system in that sense is again an important aspect of nature of sanitation that it is a science which deals with the empirical truth.

But the most important thing is that while analyzing the truth the true nature has to be with regard to the empirical objects it has to be followed in terms of formal and the rigorous method and this scientific method of analysis and generalization enables the scientist to verify the findings again and again. So we try to see that the two prevalent methods which are to be found in the realm of science is both deductive and the inductive method and in deductive method the conclusion is drawn from the set of self-evident propositions. On the other hand in the inductive method the particular truth in empirical situations are gathered from the general truth which is established. So thus the deduction process from the general to the particular or the induction process which proceeds from particular to general are going to be important aspect of the scientist and that is how we try to make our method more scientific. So a valid scientific generalization is going to be an outcome of this induction and deduction in terms of a system.

It borrows the element of the formal truth from the deduction and the material truth from induction and based on that they try to come out with the logical reasoning. So we try to see that we have to establish a uniform law which is applicable to all individuals in the societies and that of course is going to be an important aspect with regard to the nature of sanitation. So one finds that sanitation employs these strategies to retain the objectivity in analysis. So what is required in that sense is the use of scientific method, the factual study, the discovery of cause and effect relationship, the universal law and finally the predictions. So we are if we are in that position we are saying that our nature in that sense is more scientific.

So sanitation as a discipline incorporates these issues in order to make or claim its meaning of meaningful and effective understanding in that sense it adopts the scientific tools and statistical analysis for accuracy in generalization and prediction. So this is how we try to see that what we have for sociology as a discipline. I think the what you can say the offspring of that in terms of sociology of sanitation as one branch has to also admit to these various what you can say nature in that sense which are there. So the similar bearings have to be there with regard to the sanitation as one of the branch of sociology

in that sense. Now coming down to another important aspect that is how we can see the objective subject matter and the scope of sanitation is going to be an important issue.

So what is the objective of sanitation and then what is the subject matter in that sense this is again important and how we are going to treat that let us try to speak about these things. I think the very first thing in that sense which we have to take into consideration is that the sanitation is about the environment and health that of course is perfectly correct in that sense the broader aim of sanitation directly or indirectly deals with the issue of sanitation which is about the environment and health and the sanitation improvement is more than just the provision of toilets it is the process of sustained environment and health improvement. So sanitation improvement must be accompanied by the environmental health and hygiene promotion activities in the society that of course is one important aspect. Then second important thing in that sense is the basic sanitation is to be seen in terms of human rights and here I think government has an obligation to create an enabling environment through which all societies can access to the basic sanitation services. So the provision of access to sanitation services is a national and the local government responsibilities and that has to be carried forward in terms of the sanitation services and then we try to speak about the health for all agenda which is basically that we try to speak about that the public funds which are bigger in resources in that sense are to be put forth for the better health and that of course is another way in order to overcome the inadequate sanitation services and then we try to speak about the equitable regional allocation of the developmental resources so that every region in that sense have its local potentiality for development.

So we basically try to speak about the improvement of sanitation services which should be equitably distributed through the country according to the population. So we try to speak about that the risk to health of not supporting the sanitation improvement has to be minimized and we have to see another important aspect that water has an economic value and the way in which the sanitary services are provided must take into account the growing scarcity of good quality of water because now I think we are trying to speak about the water ATM or the water bottled in that sense as such so water has an economic value. So we have to see that how we are going to safeguard it and the polluters pay the principles. This is another important aspect that polluters must pay the cost of cleaning of the impact. I think we try to see through the CSR directly or indirectly that the polluters must pay the cost of cleaning up the impact of the pollution on the environment and that is where we try to see that the various impact assessments in that sense.

We the society who are directly or indirectly responsible for the pollution in that sense have to bear the cost in terms of getting the scarcity of resources and there is always a tussle for that and then I think we try to speak about the sanitation services which are to be financially sustainable. So for that I think sanitation services must be sustainable in terms of both capital and the recurrent cost that is another important aspect and then I

think we try to speak about the environmental integrity. I think that of course is the most essential thing. Now I think this recent G20 summit in that sense was trying to speak about that Vasudev Kudungkum whereby we try to see that whole world in that sense of course is trying to be part and parcel of our family in that sense as such and the basic idea in that sense of course is that we have to safeguard the environmental integrity. So it is not me or you in that sense it is the totality in that sense which have to take into consideration.

The environment must be protected from the potentially negative impact of the sanitation system. So sanitation is to be understood as an interplay between the men, society and environment in the private as well as public sphere. So our concern in that sense in terms of the subject matter of sanitation are to be discussed in a broader way. The first important thing is the major concerns of sanitation is creation of the healthy society. I think that is of course is the basic principle that sanitation concern in that sense is to create the healthy society.

It seeks to analyze the factors and the forces promoting health and well-being of the individuals in a society and second important aspect in that sense is that sanitation gives sufficient attention to the study of primary units of social and environmental life and it is concerned with the social acts and social relationships and we try to see that it has something to do with the ecological milieu in terms of the cultural framework and then we try to speak about that the third element which is it deals with the various social processes such as cooperation, competition and conflict in the sustainability of environment as well as in terms of holistic development. Fourthly, it involves the study of research methods and theorization of the issue of health and well-being of the men in a society and fifthly it deals with the remedial measures for eradication of social evils in the society. So I think it is a whole package in that sense which we have to get to when we are trying to speak about the issue of sanitation and it tries to start from the basic thing of creation of healthy society to leading to certain amount of eradications of the various social evils in the society. So it encompasses the different spheres of life in that sense and that is where we try to see that sanitation is to be seen as an applied discipline because it is basically seen as the way in which we can reform the society. So the scope of sanitation is basically the study of all the components either it is social, physical, physiological, pathological with all its complexities and the prime scope of sanitation have to be taken into consideration in terms of a scientific, systematic and comprehensive study of health and hygiene in relation to the social organization and its associated structural function.

And sanitation being an interdisciplinary social organization the whole idea is that it tries to incorporate the broader areas under its framework which has a widening effect in terms of the scope for the science from science to the social sciences. So I think we have to see

that it incorporates the various national and the global frameworks it includes the evaluation of the health outcomes, the aerobic and anaerobic treatments, the climate change, the corporate social responsibilities, the ecological sanitation, equity issues in society, household treatment and the safe storage, hygiene and the behavioral changes and also the ICT and health environment issues and along with that we have the industrial hygiene, we have the innovations in water supply in wastewater, we have the low tech treatment system, measurement and risk management, operation and maintenance of water supply system, prevention and treatment of waterborne illness, the public health education, the river restoration, sanitation and health, sanitation both in urban the rural areas, the school education, the soil quality, sustainable development and ultimately the millennium development goal. And through that we can have the waste management, the waste water reclamation and the reuse, the water and sanitation services, the water economics, the water policy and governance, the water quality then the water source protection. So that way I think if you try to see it tries to covers the whole range of the complexity of the society and the basic concern in that sense of course is to have the hygienic and the healthy society and the basic idea is that it tries to safeguard or it tries to focus upon certain issues which has certain bearings with regard to preservation of water, the natural resources and also trying to have the equity in terms of the distribution of the resources. So, the concept of sanitation which was earlier limited to the disposal of human excreta or in terms of open ditches pit latrines bucket system, but now it has to be seen in terms of a comprehensive concept which includes the liquid and the solid waste disposal, food hygiene's, personal domestic as well as environmental hygienes and the proper sanitation is important not only from the general health point of view, but it is also vital to play in the role of the social life.

So the sanitation is one of the basic determinants of the quality of life and the human development index. So I think somewhere we have to speak about the quality of life index in that sense or the human development index in that sense we have to speak about the issue of sanitation as one of an important indicator. So good sanitary practices prevent the contamination of water and soil and thereby it prevents the disease. So we have the understanding of the concept of sanitation which may be expanded to include the personal hygiene, the home sanitation, the safe water, garbage disposal, excreta disposal and the water waste water disposal. So this is where we try to say that the sanitation is the hygiene in terms of mean promoting the health, good health through prevention of the human contact with the hazardous or the hazards of waste as well as the treatment of the proper disposal of the sewerage waste water.

So hazard can be physical, microbiological or sometimes say chemical agent of disease. So the waste that can cause health problems includes the human and the animal feces, the solid waste, the domestic and the waste water. We have to speak about the industrial waste also. We have to speak about the hygiene means to prevention which can be

because of the engineering solutions and we are also trying to speak about the personal hygiene practices which are to be seen in terms of the safe hand washing with the soap. So all the components in that sense are going to be equally important as such.

The use of technology in toilet making is also important as such. I think we try to see that the World Health Organization which tries to state that sanitation generally refers to the provision of facilities and the services for the safe disposal of the human urine and the feces. And that way I think inadequate sanitation is the major cause of the disease worldwide and improving the sanitation is known to be significant which can benefit in terms of its impact on health both in the household and across communities. So that way I think the word sanitation should refer to the maintenance of the hygienic conditions through which services and the garbage collections and the waste water disposals can be put into practice in terms of the healthy practices.

That is going to be an important aspect. So we have to see that the scope of application of the term sanitation has to have a wide range of subjects. It includes the improved sanitation which refers to the management of the human feces at the household level. We try to speak about the onsite sanitation which is basically the collection and the treatment of the waste is to be done in terms of the septic tanks or patrons in that sense. We have also to speak about the food sanitation which refers to the hygiene measures for ensuring the food safety. We have also to speak about the environmental sanitation which is basically linked to the control of environmental factors that forms the links with regard to the transmission through the disease of the disease and that is going to be an important aspect.

And then we have to speak about the ecological sanitation which basically is to be seen in terms of recycling of the nutrients and the water from the human and the animal waste into a hygienic safe manner. That is going to be an important aspect. So I think we have the various aspect in that sense in terms of the scope of sanitation. I think it is quite multifaceted.

It is across the disciplines. It is across the governance. It is across the nation in that sense and these are the things which we have to take into consideration when we try to speak about the scope of the sanitation. And then comes why there is a need and the importance of sanitation. I think in terms of its significance or in terms of its validity in that sense we can say that any developing countries if it has the urban water supply system which is performed poorly then I think it is going to have its impact in terms of the bad health. So we have to see that developing countries has to face the basic challenges in terms of reliable water supply and the sanitation services. And the public utilities in that sense are going to be seen as one important aspect which they have to take care.

So this means that the utilities are not functionally proper or reaching to the peoples directly and that is one important reason why the sanitation affairs are to be seen in the poorest state which includes the under investment due to the lack of stable and sufficient volumes of finance on that particular issue. Then the high population growth in the urban areas which is quite disproportionate in that sense. Then the public utilities have to be treated as a social service that is not been identified or the insufficient operation and management of the autonomy from the government is not put into practice or the poor management in terms of coordination and regulations in that sense. And finally the issue of inefficiency which we try to see in terms of the financial props up of waiting in terms of bankruptcy and access to the improved water and sanitation facilities which is not happening. So we have to speak about these particular issues which are going to be quite sensitive and the most important thing is that that good hand washing practices have to be shown as one of the practice to reduce the incidence of the other disease.

And this is where we try to see that this small instance in that sense is going to bring a drastic change in terms of avoiding the disease like pneumonia or scabies or the skin or the infections or diarrhea and equally important like the cholera in that sense. So we have to see that the promotion of hand washing with the soap is seen as a key strategy in that sense to bring about the drastic change in the health conditions. So we have to see that the key to increase the practices of hand washing is going to bring about or it promotes the behavioral change through motivations, information and education and that is where we try to see that we have to speak about the hygiene lessons for children in the schools and encouragement of the children to demonstrate the good practices to their family members. So I think it is a change which has to come up and then the different individuals have to play in their own way at the different capacities and that is where we try to see that the true aspect of hygiene in that sense has to be maintained and it has to be emphasized that the importance of sanitation in any country especially in the developing and underdeveloped country is to be seen as quite relevant because why it is important that we have to speak about the sort of an importance of that because it is an important intervention that of course is the first point we have to see that it is an inadequate sanitation management which is going to be seen. So in order to avoid that in order to reduce the poverty we have to speak about the providing people with the sanitation and the water services that is going to be one important aspect.

Then sanitation which can be seen as a drive to the local economic development is going to be another important aspect and we have to speak about the improving sanitation which can drive the local economic development and that of course is going to be an important aspect and then the third thing in that sense is that sanitation is not a right which is to be enjoyed by everyone. So we have to see that how it has to be promoted to reach to everybody in that sense that is going to be an important issue. I think the basic instance in that sense is the use of the plastic bag or to go to the toilet or to have the open

defecation all these things in that sense are related to the issue of sanitation. So it is not been enjoyed by everybody in terms of sanitation as a right and then equally important is the millennium development goal that is the MDGs and these sanitation MDGs seeks to have the proportion of people without access to the basic sanitation which has been seen from the year 1990 to 2015. So we have to achieve this particular target to have to additional people in corrodes in that sense we have to speak about that how we are going to put it up to 90% in the future coming years in that sense that is going to be another important aspect.

And finally then we have to speak about the issues and strategies in sanitation that how we are going to deal with this issue of sanitation in terms of its relationship or interface with the government. So we basically try to see that we have to speak about certain important issues either it is the question of the community participation or it is the question of technology options or it is the question of financing or it is the question of institutional arrangements and the political will. All these things in that sense are to be seen. Let us try to say the first important thing is that we have to identify the community in that sense in which the sanitation has to be taken into consideration. So I think somewhere we have to see that the enterprise beginning comes from that when we are going to identify the communities as the source of inspiration or as the key players and the basic thing in that sense is that we have to speak about that how strategically we are going to have the communities which are going to be program oriented.

And the basic idea in that sense of course is that changing the community has to be seen in terms of bringing the strategic gains to the larger population. And here we basically try to see that how and what are the facilities which are been lacking with regard to the hygiene behavior that has to be taken into consideration. We have to choose the appropriate option which the community feels or they identify is going to be important. So that of course is one starting point identification of the community. Second is the community participation involving the community into the participation is to be seen in terms of the fact that whatsoever is the type of intervention the most important of course is that the community should be the equal player.

And for that I think we have to have the building related skills in that sense in terms of the personal household and the environmental level that has to be addressed. And the most important aspect in that sense is that we have to speak about the community participation, we have to speak about how they can be seen as the important planners, how they can be seen as the action oriented, how they can monitor their things in that sense. And we have to see that how we can have the knowledge about health and hygiene and sanitation in terms of practices especially the population like it is the villagers or the peri urban dwellers who has to be transmitted this knowledge so that they can well equipped with the issue of sanitation and trying to make the shift with regard to that. So we have to see it in terms of the resource and the capability building both individually

and at the community level. And then the third thing in that sense is in terms of strategy is the technology option.

I think the technology option explores the factors which are involved in selecting the range of technical options. It discusses the process of the consumer's choice what the consumer wants and sanitation is not simply the issue of latrines which I said earlier but rather it is an awareness and the capacities for managing the waste control, the domestic waste, the solid waste and the human and animal waste. So we have to speak about that no single technology can be seen as an answer to everything in that sense it is not a magic wonder but what has to be seen in that sense of course is that the technology which are appropriate are to be put for generalization. We have to speak about the issue of sustainability and environmental friendly aspect also and we have to see that they have to be seen as a key role player with regard to the linkage between the designer, the producers, wholesalers, retailers and the consumers.

And it is having an intervention of the private sector as well. So we have to speak about these aspects also and then we try to speak about the issue of financing which of course I think is going to be very important as such because when we try to speak about the finance focus the basic answer in that sense is the self-financing strategies. I think now government is also trying to promote the issue of entrepreneurship or we try to speak about that how we can have the self-reliant model and for that I think we have to see that who has the willingness to pay or contribute has to be seen on priority and that is going to be important because we have to ensure the issue of accountability, prioritizing the use of local resources and promoting the gender equity that is going to be an important aspect. And within that framework we have to see that we have to speak about the role of NGOs, the role of private sectors in that sense which can come and contribute in terms of what you prioritizing the finance issues in that sense and can supplement that for the larger interest of the nation. And then I think we try to speak about the institutional arrangement and when we say about the institutional arrangement the whole idea in that sense of course is that we have to speak about the sectors which are basically meant for having certain amount of responsibilities. We have to identify what are the various central government, local government or the state government machineries, the private sectors in that sense which has to be taken into consideration.

So the sanitation program must be designed in such a fashion that they have to have the multi players and the most important thing in that sense of course is the synergy between the different bodies that is going to be an important issue. And we have to see that how it is going to be an effective program to bring about the change both at the local and the community level in terms of the institutional arrangements as such and that is going to be important because that will lead to the effective decision making and in terms of transformation of the issue of sanitation. And then we try to speak about the political will. I think we have to have the building of the political will which is going to be equally



important and for that I think we have to speak about certain issues which are related to the issue of how the political parties take into consideration the issue of the specific component. I think the present government as I was sharing earlier also is having a political will to have the Swachh Bharat and through that they are trying to have eradication of various aspects in that sense and I think the issue of sanitation in that sense is seen as one of an important agenda in the name of clean water in that sense and green India in that sense or the green environment.

All these things in that sense are happening through the flagship program of the present government in that sense and which are basically seen like this Ujla Yojna which is trying to have the concern for the rural women in that sense in terms of providing the safe what you can say schemes for the electrification or for the gas. All these things in that sense are happening and all these things in that sense are adding to the issue of sanitation in one or the other way. So we have to speak about that the political will in that sense is going to be an important aspect we have to speak about how the different sectors in that sense has to go in alignment with the political will and that is where we have to speak about the issue of building the trust and the rapport in that sense with the various organizations. Challenging assumptions are to be treated on priority we have to speak about the question of the information which is available for the time management in that sense and apart from that we try to speak about that we have the realistic and the systematic way to deal with that. I think this is where we try to see that these are the certain strategies which has to be formulated and the whole idea in that sense of course is that we have to speak about the various ways in which we can see that the attempt in that sense has to be made whereby we can speak about the concern for the sanitation in terms of its complete use.

I think quickly let us try to deal with the issue of the genesis of sociology of sanitation we have dealt in detail about this issue in the historical perspective but as a specific discipline if you try to see the sociology of sanitation I think the sociology of sanitation is a sub branch of medical sociology which has emerged in the United States in during 1940s and this discipline that investigate the social cause and consequences of health and illness is going to be important especially it was recognized in terms of relation with the sociology and sanitation that we try to see that it has its own essential aspect which includes the issue of social values depending upon the largely with regard to the good health and the good health practices in that sense is a prerequisite for the adequate functioning of individual and society. And for that sake we try to see that what Rene Dubos in 1981 was trying to speak about that health can be defined as the ability to function and keeping that particular thing in mind we can say that health is partly determined in terms of the conditions. So we can say that the social factors which play a critical role with regard to the importance of the role of health is going to be important. So we have to have the clean food, the clean supply of water, the sanitary schools, public baths in that

sense, educate housings and many other things in that sense which are going to be important and we have to see that sanitation and sociology has a clear linkage I think people like Durkheim in that sense if you try to directly link we can say that sociology of sanitation is trying to make a shift from profane to the sacred element if you try to see in a broader sense and that way we try to even locate Louis Dumont contribution we try to see in the Homo - hierarchius he was trying to speak about the issue of pure and impure and that is going to be an important aspect. And then I think M.N. Srinivas was trying to speak about the issue of purity and pollution which is equally going to be important and we basically try to see that we have this whole sentiment of the ritual purification with regard to the Hindu mythology that Hindu religion focusing upon the sanitation with regard to the purification of one's own paap or the issue related to the evils in the lifetime and how they have to have their reincarnation in terms of visiting to the different holy pilgrimage across the globe across the Indian society and at this juncture I think Prayag Raj kumbh in that sense is considered to be important or the Ghaat of Varanasi or Nasik in that sense they are going to be an important issue.

So, virtually we try to see that what sanitation according to Talbot in 1896 is acknowledged to be as a greatest scope for the coming years and we have to speak about the sanitary reforms and that is where we try to see that people are basically trying to speak about the good health in terms of its natural conditions in terms of the social and corporate relations and more important is that sanitary reforms in that sense is going to be seen as an appeal of the consigns of the modern civilization and for that I think in terms of the understanding of the things we try to speak about that the relationship between sanitation and sociology in that sense is going to be quite critical and we have to speak about that how the sanitation then is going to bring about certain amount of control in terms of creating the clean air, the good pavement, the public pass in that sense and sanitation and sociology must go hand in hand in order to improve upon the race and that of course is the basic things which we try to see. The most important aspect of course is that how we are going to take into consideration the linkage between the sanitation and so called sociology is going to be seen as an interface and this particular module in that sense which basically deals with all these aspects. So, I think this will give you the whole horizon about the whole module in that sense which is part and this is the basic aim and I am trying to just promote that how sanitation in that sense is going to be the dream projects for the government of India and also it is going to be important in terms of its linkage with sociology. So, I hope you have enjoyed this particular discussions and we will try to interact further in the coming modules related to these particular issues.

Thank you. .