

Introduction to Political Theory
Dr. Mithilesh Kumar Jha
Department of Humanities and Social Sciences
Indian Institute of Technology, Guwahati

Lecture - 29

Politics & Environmental ethics - II: climate change and environmental justice

Hello and welcome friends to the second and concluding lecture on this new topic that we have started that is Political Theory and Environmental Ethics and what kind of challenge that environmental crisis or climate change push to political theory as a discipline.

So, this is some of the thing which we have been discussing and in the last class we have discussed how this climate change or environmental crisis emerged historically especially after the post industrial development of discourse about going back to land or romantic environmentalism and more specifically from the 1960s and 70s, when there is a kind of gloom and doom about environment. And then we have seen the responses to the climate change or environmental crisis especially true the three kind of responses that is deliberative democracy, the idea to extend or expand the notion of citizenship to include environmental citizenship and finally, inculcating some of the green virtues. So, this we have discussed in the previous lecture.

Today we are going to very briefly discuss these whole issue of climate change and if a negotiation that have emerged to tackle or confront this climate change or environmental crisis and we will focus more on this concept of environmental justice and how it tries to extend the understanding of justice that we have done as a topic separately in this course. So, how environmental justice expand on those notions of justice; we will focus more on that. While doing that we will also try to see how environmental justice or environmental crisis and many of the requirements that it necessitates is consistent or inconsistent with many of the values and premises of liberal democracies and liberalism.

(Refer Slide Time: 02:39)

Intro

- Climate change and environmental crisis pose serious challenges to humanity as a whole. Tackling it requires new set of values which will lead to newer domestic and world political order. Many of the values and approaches to politics in its present form are not adequate to solve this problem. And therefore, environmental issues demands new lexicon of politics and democracy.
- In the previous lecture we have discussed how it argues for change in the notion of democracy and emphasize of deliberative democracy with free speech, environmental citizenship, and inculcating 'green values' among the individuals and communities to tackle the problems of climate change. We have also discussed how it require efforts at the local, national and international levels. It also require modification in the pattern of consumption and in that individual, communities, state, market and international agencies all play a significant role.
- In this lecture today we will focus briefly on climate change and environmentalism and how it is consistent or inconsistent with some of the liberal values and premises. However, we will focus more on the notion of environmental justice. Climate change is a reality. And many parts of the world are affected by it. It raise questions to fundamental concepts of political theory such justice, faire share, obligation and so on.
- *Stockholm Conference (1972)* begins a serious discussion on the relationship between man and nature/environment. It was in this conference that the term environmental justice was invoked by developing countries against the developed countries. And since then there have been numerous discussions and debates on environmental issues at the international level.

2

So, climate change and environmental crisis pose a serious challenge to humanity as a whole, this point we have covered in the previous lecture. So, it is not just to political theory that it pose a challenge; it also pose a challenge to many of the problems that humanity as a whole faces, there are certain direct impact of climate change, but there are many indirect effect or influence of a climate change and world as a whole; whether that part of the world is the cause of the problem or not they all face the effect of climate change this point we have discussed so it poses a challenge to the humanity as a whole.

And tackling it requires a new set of values which will lead to newer domestic and world political order. So, what climate change or environmental crisis required is to develop a new set of value which will lead to create a new set of domestic or international political order. And many of the values and approaches to politics in its present form are simply not adequate to solve this problem of climate change or environmental crisis.

And therefore, environmental issues demands new lexicon, new concept or new terminology of politics and democracy in modern society. So, it necessitates new values, new concepts, new terminology to understand the problem and then respond positively to tackle this problem successfully.

So, in the previous lecture we have discussed how it argues for change in the notion of democracy and emphasize on deliberative democracy with free speech, environmental citizenship and inculcating 'green values' among the individual and communities to

tackle the problems of climate change. We have also discussed how it required efforts at local, national and international levels and it also requires modification in the pattern of consumption and in that individual, community, state, market and international agencies all play a significant role. So, there has to be a network a kind of coherent or a kind of continuous effort is starting from the individual, to the local, to the national, to the international level.

In tackling the climate change all these players play a very significant role, so it cannot be tackled by one country because the climate change as a problem is beyond the purview of a single nation or single country. It cannot be tackled only by few countries or a group of countries because another countries through its emissions or present rate of consumptions and emission of green house gases can jeopardized efforts of climate change by other country. So, it requires a kind of collective effort to tackle it that starts from individual to community at the local level to the national and the international level.

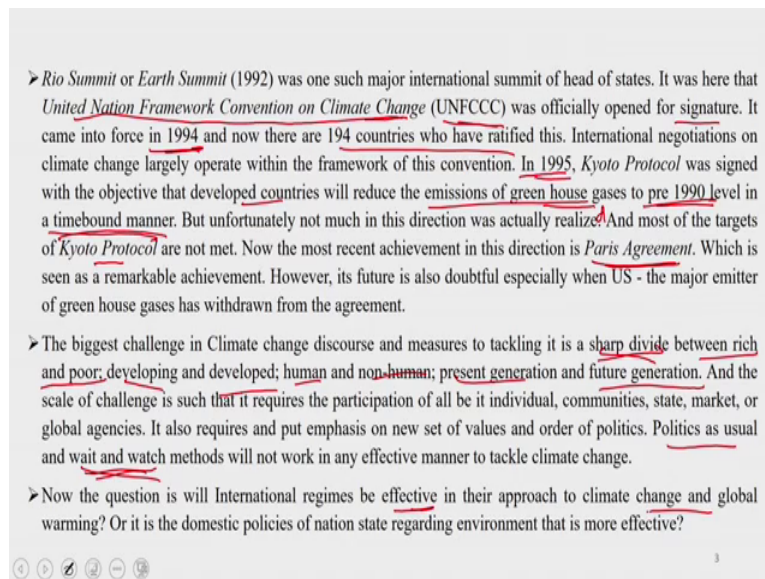
Now, in this lecture today we will focus briefly on climate change and environmentalism and how it is consistent and inconsistent with some of the liberal values and premises. However, we will focus more on the notion of environmental justice. Climate change in today's world is a reality and many parts of the world are affected by it. It raises questions to the fundamental concepts of political theory that we have discussed such as justice, what is fair share, who has obligation and how much who share the responsibility and should all share the same or equal responsibility those who are polluted or those who are the victim of pollution. So, they should be differentiated role or they should be uniform equal role for everyone.

So, these are some of the concepts that requires phrase theorization or revision in light of new development particularly the climate change an environmental crisis. So, a Stockholm Conference in 1972 begins a serious discussion on the relationship between man and nature or man and environment. It was in this conference for the first time that environmental justice as a term was invoked by and developing countries against the developed countries.

I will come back to this point again in later part of this lecture, but the contemporary times a Stockholm Conference was the beginning of a serious a deliberation on this notion of environmental justice and since then they have been numerous discussion and

debates on environmental issues at the international level.

(Refer Slide Time: 07:29)



Rio Summit or Earth Summit in 1992 was one such major international summit of head of the states. So, many head of a states in 1992 participated in this summit which is called earth summit and that is a testimony of the seriousness of the environmental issue that is posing, the serious challenge and threatening the very existence of humanity or many non-human species on the planet. So, it was here at the reuse summit that United Nation Framework Convention on Climate Change that is UNFCCC was officially opened for signature and it came into force in 1994 and now there are 194 countries who have rectified this.

Now, this convention on climate change or framework convention on climate change which is under the ages of united nation, all the international negotiations on climate change largely operate within this framework of united nation framework convention on climate change. So, further on in 1995 we have Kyoto Protocol that was signed with the objective that developed countries will reduce the emissions of greenhouse gases to pre 1990 level in a time bound manner. But unfortunately not much in this direction was actually realized and most of the targets of Kyoto Protocol are not met.

So, now the most recent achievement in this direction is the Paris Agreement, which is a seen as a remarkable achievement as there is a kind of universal, consensus one having a binding, commitment towards reducing green house gases or to tackling a climate change

or environmental crisis. However, the future of Paris Agreement is also not good especially when the US which is one of the largest emitters of green house gases has pulled back or withdrawn from the various peace agreements.

So, in these international negotiations or deliberation on climate change we have seen that, there is a response; there is a seriousness that is attached to the issue. But when it comes to acting upon it or implementing those a decisions or the agreements that is arrived at the world as a whole is not effectively implementing those agreements which is arrived at the international deliberations and conference on climate change.

So, what is the biggest challenge in the climate change discourse and measures that is needed to tackling the climate change? The biggest challenge in that is the divide that exist between the rich and the poor, developing and developed countries and therefore, the question of who shares the responsibility, who bears the cost and who benefits out of these state treaty? And that becomes a central contentious issue in environmental debates and deliberation at the global level. So, human and non-human, present generation or the future generation; so, in the climate change it is the future generation who has no role in causing environmental change or a climate change and yet they will be the worst victim of climate change.

So, these issues makes any effective implementation of agreements or deliberation very problematic because of this division between the rich and poor; developing and developed world; human or a non-human; present generation and future generation. That makes the whole discourse of climate change or environmental debates a very contentious and technical issue and there is no consensus there is no agreement on how to go about it, who is going to share the cost, who will be the beneficiary of these agreements and deliberation.

So, the scale and skill of challenges such that it requires the participation of all, be it individual community, state, market or the globalisation. So, all should come forward to tackle this challenge which requires the change in the values life styles the way we consume and, so on. So, it requires a kind of concentrated or the collective effort to tackle because of the serious scale of the problem of climate change. It also requires and put emphasis on new set of values in order of politics suggested, it requires new lexicon of politics both are domestic or at the international level. And a politics as usual and wait

and watch methods of tackling any problem such as climate change will not work in any effective manner to tackle a problem like climate change.

So, the now question before us is will international regimes such as UNFCCC or secured to protocol or Paris Agreement or in part group of 21 and so on. Will they work in an effective manner to climate change or global warming? Or it is a still the state within its territory which is more effective in a implementing environmental law. So such as Germany or Netherlands or New Zealand and many such countries who are more effective in comparison to say international agencies or regimes who are responsible for tackling climate change or arriving at a consensus about a responding to the climate change.

So, the question before us is that is it international agency who should play a more decisive role or more influential role in tackling climate change? Have we achieved much or top of the international conference regimes or summits? Or it is still the nation state within on domestic territory that is more effective in terms of curbing climate change and global warming.

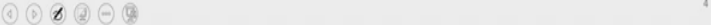
This is still an open question because while the states within its territory is trying to be more responsible to the environmental challenges, but then there are many states which is also giving priority to the economic development as it is understood today by neglecting some of the environmental concerns. So, then the international agreements or regimes play a significant role.

However, on the other hand the international agreements or deliberations is also not as effective as it should be or as it is expected. So, many scholars have now consensus that the approach of wait and watch and business as usual will not help in mitigating the climate change and we made each stage when it will be too late to do anything about climate change. This remains an open questions not just for political theory, but humanity as a whole too hard to go about it.

(Refer Slide Time: 15:02)

Environmentalism and liberal values

- Environmentalism in many ways question many core premises or values of liberalism. It argues for various changes. First, the argument of state neutrality and division of self regarding function and other regarding functions are questioned on the ground that such approach fail to recognize the role of individual, community, and state in tackling climate change. In other words it argues for a value-committed, non-neutral policies of the state to set new values and standards in the society. The premise of such argument is the idea that 'everything is connected to everything else'. And neutrality is not an option nor any action is innocent. It basically means all actions are part of either problem or solution. The challenge for the democracy and politics in contemporary times is to strike a balance between different choices and preferences of individuals and communities in a manner that help in mitigating climate change.
- The problem with environmentalism and liberal value is that many liberal values, such as the idea that individuals should be allowed to do or act as they please, are not in consistent with commitment to environment values. Which require changes in the attitude and lifestyle of individuals and communities.
- Climate change and environmental crisis is going to affect both – those who care for environment and those who do not. Now the point is how to struck a balance where the preservation of environment goes along with allowing the people to lead their lives in their preferred ways. Do we have such options? Can we still deny the climate change? How far the messy world of politics in its present form are capable of striking such a balance?



Now, if you look at some of the consistencies and inconsistencies between environmentalism and liberal value, we will see how environmentalism pose a kind of serious challenge to some of the values and foundational premises of liberalism. So, it questions many core premises and values of liberalism and it argues for various changes in such values or premises.

So, first in liberalism the argument is that states should be a neutral body, it should not take side it should not take normative positions. So, as an institution it should be a neutral institution without taking any normative side from any sections of the society, so it should be a neutral entity or institution. And then the very premise of liberalism is there is a kind of divide between self regarding or the others regarding functions and state has a role only in others regarding function.

Now, these premises of liberalism it challenge because it fails to recognise the role of individual, community and state in tackling climate change. In other words it argues for value-committed and non-neutral policies of the state to set new values for the individual and communities to tackle the challenge in standards in the society. So, in contrast to the liberal idea of a state neutrality or division of live between self regarding and others regarding.

The environmental activist or the scholars argue to make a state-value-committed and that value is towards the environment protection of environment, safeguarding the

environment, protecting the ecology, protecting the natural habitats and so on. So, the state to tackle environmental challenges and the crisis needs to be a value oriented states. It has to have a non-neutral policy that will lead or help in creating new set of values and standards in the society for the individual and communities to follow.

So, a state cannot act like a neutralism without any concern to environment or other issues in the society. So, in contrast to the liberal ideal of a state neutrality environmentalism argue for a value-committed non-neutral policies of the state. So, the premise of this argument is that 'everything is connected to everything else' soon, in the liberal idea is that there is the sphere of life where the individual action is just limited to his oneself and it has no influence on the others.

Whereas, environmentalism discourse believe in this idea of everything is connected to everything else. So, no action is innocent or in isolation it cannot be seen or it cannot be understood in isolation, but it is always connected to something else. So, any actions of individual or community whether it is self regarding or the other regarding is always part of some problem or part of solutions, so there can be many examples of it.

So, as an individual you may prefer to go for a walk in the wild or in the jungle, but also there may be some individual who want to have a nice road to drive a car and so on. Now these two kind of a value preference going for a walk in the jungle and having a nice road to drive vehicle is not consistent with each other.

Now, how to develop a balance where the individual having the preference for going to a jungle for a walk and the person who want to drive a nice car on the road should be consistent with each other and that is the real problem. So, for environment your preference your values or actions may either be the part of solution or be the part of problem. It cannot be something which in the isolation and just limited to one individual and his life alone.

So, the environmental premise of arguing against the state neutrality is this idea, that every action or everything on this planet is connecting to everything else your habitat, your life style, your consumption influence something else. So, the cloths you wear, the food you eat, the modes of transportation that you use is not just limited to your on individuality, but it also has influence on the environment may be in the negative or in the positive sense, but all your actions has some connection to the larger issues.

So, the point here is that environmentalism argues against the neutrality or the idea of a state neutrality or division of self regarding and others regarding action in liberalism and those ideals are inconsistent with the environmental ideas of arguing for a value-committed and non-neutral policies of the state to set new values and standards in the society.

So, the challenge for democracy and politics in contemporary times is to strike a balance between different choices and preference of individuals and communities in a manner that help in mitigating climate change. And that requires constant negotiation and renegotiation of many of the values through which or by which individual and communities live or organise their life.

So, the problem with environmentalism and liberal value is that, many liberal value such as the idea that individual should be allowed. So, in the liberalism if you remember individual is understood as a self defining rational agent who knows what is in his or her best interest. And a state should permit the individual freedom or liberty to express himself or to do what is good for him and a society which provide the maximum a scope for the individual creativity and freedom to do what he wish to do and what he or she thinks is good for him or her, then that society will be a more prosperous society.

So, that kind of liberal understanding of allowing on giving individual scope or liberty to do or act as the please are not inconsistent with the commitment to the environmental value because environmental issue or the crisis requires individual to act, behave, consume and live in a particular manner. And therefore, this liberal idea of allowing individual to do or act as the please is not inconsistent with the commitment to the environmental value, which requires changes in the attitude and lifestyles of individual and community.

So, climate change an environmental crisis is going to affect both those who care for environment or those who do not. So, the crisis of environment or the climate change or global warming is not something which is affecting only those who do not believe in it, but also those who believe in the climate change are equally affected or victim of the climate change.

Now the point is for modern liberal democracy and politics is to how to struck a balance where the preservation of environment goes along with allowing the people to lead their

lives in their preferred ways. Do we have such option? Or can we still deny the climate change? How far the messy world of politics in its present form are capable of striking such balance? So, these are some of the contentious issue of our modern politics and democracy where we continue to believe in the individual in a responsible, rational manner and yet their lifestyle, consumption affects the environment in a very destructive manner. Now should we permit that or how to maintain a balance where we will preserve or protect the environment, but we will also allow the individual to live the life the way he or she want to live.

Now in the present day politics to arrive at a balance; balance between these two is something which is very difficult to arrive at and this remains one of the problem with environmentalism or many of the value preferences and premises of liberalism.

(Refer Slide Time: 23:56)

Environmental Justice

- The central or foundational idea of modern liberal democracies is a commitment to the principle of justice. However, this idea is also central to environmentalism. It is often argued that although environmentalists have taken the idea of justice seriously, it is the liberal political theorist who for a long time have not taken the environment seriously.
- Aristotle argued about two kinds of justice – distributive and corrective. Distributive notion of justice talks about the ways in which goods, resources or burdens should be distributed in a society, whereas corrective justice is about compensation and punishment. Environmental justice include both although it focuses more on the distributive aspect of justice. So, if some has caused harm to other's natural habitat or resources then corrective theory of justice applies. However, environmental justice is primarily a distributive justice.
- Here, environment is seen as a resource. And how it should be distributed not just among the present but also among the future generations necessitates principles of distributive justice. However, unlike other resources 'environment cannot physically be transferred from one community to other community and therefore the distribution of the benefits and costs of environment requires principles of justice. Now, how exactly this cost and benefits are decided, what principles of justice are deployed for its distribution, and who are the subject or beneficiaries, are open questions. And, there is no universal consensus on these questions and these are still being discussed and debated in climate negotiations locally, nationally, or globally.
- Since 1970s the idea that environmental justice is global in scope has been discussed. For the first time at *United Nation Conference on the Human Environment* in Stockholm (1972) the idea of environmental justice was introduced by developing countries against the developed world claims over clean environment and ecology. After the publication of *Global Warming in an Unequal World: A Case for Environmental Colonialism* in 1991 by the Indian environmentalists Anil Agarwal and Sunita Narain the idea of environmental justice was more seriously discussed and debated.

Now, we will finally, move to the idea of environmental justice. The central or foundational idea of modern liberal democracy is a commitment to the principle of justice. So, the idea of justice is very much central to the liberal idea or liberal democratic idea, there is a commitment to the notion of a justice. However, this idea is also central and very much central to environmentalism.

It is often argued that although environmentalists have taken the idea of justice seriously, it is the liberal political theorist who for a long time have not taken the environmental seriously and this we have discussed in the liberal traditions especially in the social

contract addition of Hobbes Locke and Rousseau How nature is central? But nature in this tradition is seen as a entity which do not have any value of its own.

So, something which has no value or without value, unless the human mix his labour with the natural resources, only when the human mix his labour with the nature then the nature acquire its value otherwise nature in itself has no value or is without value. So, the argument is in the environmentalism whether justice is taken seriously, but many liberal political theorists have not taken the question or the issue of environment that seriously.

So, Aristotle for example, talks about two kinds of justice that is distributive and corrective justice. Now this notion of justice we have discussed what will distributing concept, which talks about the ways in which goods, resources or burdens in a society is distributed among its member. However, the corrective justice in contrast is about the compensation or the punishment for some wrongdoing, some historical injustices what should be the compensation or punishment that should be met? That is the part of corrective justice, but justice is seen as a distributive concept which deals with how goods and resources and burdens in a society is judiciously or equally divided or distributed among its member.

Environmental justice include both although it focus more on the distributive aspect of justice. So, if some has caused harm to others natural habitat or natural resources then corrective theory of justice applies. However, the environmental justice is primarily a distributive justice. So, here in this understanding environment is seen as a resource like any economic goods, money, food or so on in the society. And how it should be distributed? Here with the environment is a something very special that its distribution is not just limited to the present generation.

So, the question for judicious distribution of a natural resources is not just limited only to the human or just to the present generation, but it also includes how environment and clean environment is made available also to the future generation. So, how it should be distributed not just among the present, but also among the future generation necessitates the principle of distributive justice.

However, unlike other resources environment cannot physically be transformed from one community to the other community and therefore, the distribution of the benefits and costs of environments requires principle of justice. Now, how exactly this cost and

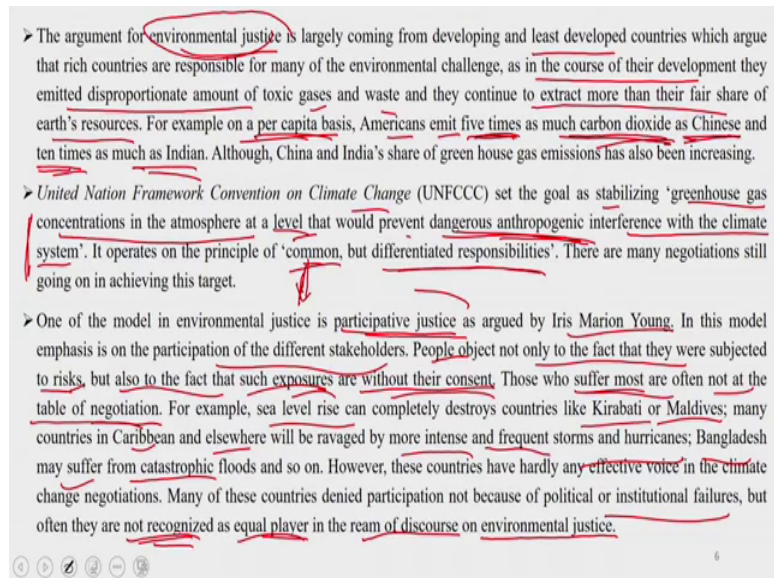
benefits are decided, what principles of justice are deployed for its distribution and who are the subject and beneficiaries of such distribution are open questions.

So, it is about distribution, but on what principles it should be decided. As I said that there are countries who played major role in polluting the environment. Now when it comes to bearing the cost of such pollution should the victim of climate change or the polluted bear the same cost or equal cost or they should be differentiated role or differentiated principle. So, these are some of the things which remains open for discussion and deliberation and there is no universal consensus on these questions and these are still being discussed and debated in climate negotiations locally, nationally and globally as well.

So, since 1970s the idea that environmental justice is a global in scope has been discussed as I said in the Stockholm Conference in 1972. So, for the first ever the United Nation Conference on Human Environment in Stockholm, the idea of environmental justice was introduced by developing countries against the developed countries demand or claim over clean environment and ecology which was available mostly in the developing countries.

Now, after the publication of *Global Warming in an Unequal World: A Case for Environmental Colonialism* in 1991 by the Indian environmentalist Anil Agarwal and Sunita Narain the idea of environmental justice was more seriously discussed and debated.

(Refer Slide Time: 29:41)



So, the argument for environmental justice is largely coming from developing and least developed countries which argued that rich countries are responsible for many of the environmental challenge, as in the course of their development they emitted disproportionate amount of toxic gas and waste and they continue to extract more than their fair share of earth resources.

So, the idea of environmental justice is largely invoked by the least developed or poor countries against the rich or prosperous country because of their role in polluting environment and also in the present day there extraction of earth resources more than their fair share in the resources. So, one of the example that is often given to understand disproportionate cost and benefit of such a discourse is the consumption of or emission of green house gases by different countries.

So, for example, on a per capita basis, Americans emit five times as much carbon dioxide which is one of the green house gases causing climate change and global warming. So, on per capita basis Americans emit five times as much carbon dioxide as a Chinese and ten times as much as an Indian. So, the share of burden should just be equal or it is in proportion to their role in polluting the environment or causing the climate change.

So, although China and India's share of green house gas emissions has been increasing, but in comparison to the global North or the prosperous countries they are still in the phase of economic development or social transformation and to be responsible to the

climate change or environment (Refer Time: 31:42) it requires some serious rethinking about development and so on.

So, United Nations Framework Convention on Climate Change set the goal as a stabilising greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. And the UNFCCC operates on this principle of common, so all the nations of the world has a responsibility towards climate, but that responsibility is not equal, it has to be common, but differentiated responsibility and that is the overall frame work and in which the climate negotiation and climate change deliberation operates.

So, there are many negotiation is still going on to achieve this target and the latest among them is the Paris Agreement as we have discussed. So, one of the model in environmental justice is besides this corrective or distributive notion of justice, the model of participative justice and this is argued by Iris Marion Young and in this model emphasis on the participation of different stakeholders in climate change negotiation. So, people object not only to the fact that they were subjected to risks, but also to the fact that such exposures to risk or without their consent. So, they were not given participation or in a participation while climate change or a climate mitigation discourse or taking place at different levels.

So, those who suffer most are not often at the table of negotiation. So, for example, sea level rise can completely destroy countries like Kiribati or Maldives. So, these country be virtually non-existent because they will be below the sea level. So, their landmarks will be under the water, many countries in Caribbean or elsewhere will be ravaged by more intense and more frequent storms and hurricanes. Countries like Bangladesh may suffer from a catastrophic floods and so on and a still these countries have hardly any effective voice in the climate change in the negotiation.

So, this participative model of justice in environmental discourse requires more and more participation of those who are the victims of climate change or worse victim of climate change. So, many of these countries denied participation not because of political or institutional failures, but often they are not recognised as equal player in the realms of discourse on environmental justice and this is not new as we have discussed in say equality or justice that, how a society excludes certain groups such as women, children,

aliens or foreigners from their idea of say citizenship or equal citizenship or free citizenship and so on.

So, that requires constant struggle constant expansion of democracy to include those who were excluded. That is also happening with climate change discourse when there are many victims or the worst victim of climate change not the given equal participation in climate in the negotiation and participative model of environmental justice, talks about making the negotiation more democratic, more participative especially of those who are going to be the worst victim of the climate change.

(Refer Slide Time: 35:26)

➤ There are many scholars and environmental activists who argue that there are many entities such as plants; animals; species; ecosystems, geological formations such as mountains, rivers, lakes and so on – who can not speak for themselves, they should also be included in the debates on environmental justice. In fact many countries began to recognize such rights of non-human entity on the planet.

Conclusion

➤ Environmental crisis pose serious challenges to political theory. It necessitates new set of value and new models of democracy. Earth's fundamental structure are altered by climate change and loss of bio-diversity. Many species have become extinct and many more are on the verge of extinction. Wildlife is everywhere in retreat.

➤ This is a challenge as well as opportunity for new set of values and models of political system to emerge. A successful response to climate change can make us a better and responsible citizen, strengthen and deepen our democracies. But the question is will it happen, especially in the messy world of 'pragmatic' politics where policies are driven by short-term, immediate goals rather than long term objectives such as climate change or global warming.

➤ Many countries have legislated environmental laws. In fact many countries recognize the clean environment rights to its citizens and future generations. For example, in 1970 senator Gaylord Nelson argued that every person's inalienable right to clean environment must be included in the US constitution. Although, this proposal was defeated but subsequently 16 US states and about 130 countries including India and China included protection of environmental laws in their constitutions. However, a lot more needs to be done.

So, besides that there are many scholars and environmental activists who argued that there are many entities such as plants, animals, a species, ecosystems, geological formations such as mountains, rivers and lakes and so on who cannot speak for themselves. Now the change in the environment also affect them who cannot speak for themselves. So, in the climate change discourse this would also be included in the debates and in fact, many countries now began to recognise the rights of non-human entities such as rivers, mountains, planet and so on.

So, environmental justice has different models we have discussed the corrective model of justice or distributive model of justice which is equally applicable in the environmental discourse. Then we have also discussed the participating model to include especially those who are the worst victim of climate change and also those who cannot speak for

themselves such as plants, animals and other species and geological formations.

Now, to conclude environmental crisis pose serious challenges to political theory and it necessitates new set of values and new models of democracy. Earth's fundamental structure are altered by climate change and loss of bio-diversity and many species have become extinct and many more are on the verge of extinction. So, Rachel Carson the silent spring that we have discussed in the first lecture talks about such extinction of a many species from the planet and it's inference on the spring or the different seasons. Wildlife is everywhere in retreat.

This is a challenge as well as an opportunity for new set of values and models of political system to emerge. Now as a collective effort or respond to climate change if we are successful and responding to climate change and tackling it effectively, then it is going to make us more, better or responsible citizen and it will also strengthen and deepen democracies in the society.

So, the question then is will it happen, especially in the messy world of pragmatic politics where politics are driven by short term or immediate goals rather than long term objectives such as climate change or global warming. Now, will that happen that will be determined by the collective efforts of individual community, state, market, nation and the international agencies such as UNFCCC.

So, that; their efforts collectively will determine how far we are successful in targeting the objectives of achieving the goals that is set for controlling or tackling climate change. So, there are many hopes such as many countries have legislated environmental laws in fact, many countries recognise, the clean environment rights to its citizen. So, including in Indian constitution article 21 which talks about right to life is also interpreted as right to clean environment. So, right to life is not just about living and breathing, but it also includes a right to clean environment.

Similarly, many countries recognise such rights of their citizen and also future generations. So, for example, in 1970 senator Gaylord Nelson in US argued that every person's inalienable right to clean environment must be included in the US constitution. Although, this proposal was defeated but subsequently 16 US states and about 130 countries including India and China included production of environmental laws in their constitution. Now, so these are the positive steps in changing or changing the norms or

the existing behaviour or life style or a consumption of individual society in terms of becoming more and more responsible to the environment or the protection of environment, but there are lot more that is needed.

So, there are positive steps, but then there are many more things that is needed to tackle this challenge and most importantly we need to change the value which will ultimately lead to a new lexicon of politics, state, democracy, citizenship and so on that will help in expanding the notion of citizenship and also the democracy. So, environmental crisis do pose challenges to political theory and some of the concepts of political theory requires revision or retheorization in the light of newer challenges of a climate change for environmental crisis.

And as I was saying that political theory is about engaging with the real or the pragmatic issues that humanity or society as a whole is facing and the contemporary challenges in 21st century and the biggest among them is the climate change and global warming. So, how political theory help in theorizing certain a new terminology, a new concepts or value premises to help those model changes some of these we have covered in this two lecture.

(Refer Slide Time: 41:26)



So, that is all in today's lecture, for today's lecture you can refer to some of these books like Goodin Robert Green Political Theory, from Catriona McKinnon again Issue in Political Theory that is a very good chapter on environmental justice to understand

environmental crisis or climate change and how democratic response to climate change can be the effective measure to tackling climate change and also John Hoffman and Paul Graham you can refer to understand some of the themes that we have discussed in environmental ethics and a political theory. So, that is all in today's lecture.

Thanks for listening thank you all.