

Episode No – 34
The Politics of Climate
INFERNO

Sh. Debabrata Nath (M.Phil.)
On behalf of Science Communicators' Forum, Kolkata

Characters:--

Sunanda (57): Teacher
Debi (52): Sunanda's wife, housewife.
Madhusree/Madhu (26): Sunanda's daughter, research scholar.
Aloke (54): Sunanda's brother, bank employee.
Kalyani (50): Aloke's wife, bank employee.
Arka (24): Aloke's son, student.

Opening Music/Title Song

Scene -1

(Sunday evening. Sunanda and Debi are watching T.V. in the hall. Madhusree enters. She sits opposite to Sunanda and Debi and looks at them with curiosity).

Debi: What's the matter Madhu?

Madhu (chuckles): Oh, unbelievable! Dad watching movie...oh.

Sunanda (embarrassingly): Oh, no, no, I'm just waiting for my turn...today's news....

Madhu: Oh, I see, the news (laugh)

Debi: Oh, Madhu don't irritate dad.

Madhu: Ok...I just came to say, uncle called on phone just now.

Sunanda: Who? Aloke?

Madhu: Yes, Aloke uncle. They're in Kolkata.

Debi: Kolkata? They've not told us anything. What are they doing there?

Madhu: They've come to attend a marriage party.

Sunanda: Wouldn't they come here?

Madhu: No, uncle said that they had to return the next day; aunty has had an important meeting.

Debi: It has never happened before. They're in Kolkata and we don't know.

Madhu: Oh, ma, don't make it so complicated. They couldn't just manage it. Uncle wanted to talk to dad and you, but the network was so weak...the call dropped repeatedly. He will call you tomorrow in the morning.

Sunanda: Are you sure, he will call again?

Madhu: Yes. Uncle said he had some very urgent matters to discuss with you.

Sunanda: Urgent matters? What ?

Debi: Are all of them well?

Madhu: Oh, ma, don't be so apprehensive.

Sunanda: You will understand when you grow up.

Madhu: Oh, daddy! I'm already grown up... no more a little girl.

Debi: Ok.

[Madhu Exits]

Sunanda: I'm wondering what could be the matter.

Debi: Really, it's intriguing, Alope never discusses his personal problems with you, never seeks your advice in any personal or family matter.

Sunanda: You're right Debi, Alope is a self-made man and this is another reason, why I am so proud of him. He never seeks any help, any advice. His decisions are always firm and irreversible.

Debi: Then what could be the urgent matter?
Well, let him call tomorrow and the riddle will be solved.

Sunanda: Debi, would you please call Madhu?

Debi: What's the matter?

Sunanda: I've something to ask her?

Debi: Is it all about Alope?

Sunanda: Yes.

Debi: I think there is no mystery in it.

Sunanda: The news? Oh, yes, well said Debi.

Change Over Music

Scene -2

(Next morning. Sunanda is seen reading the newspaper with a steaming cup of tea in front of him. Madhu and Debi join him).

Madhu: Good morning daddy. Is there any breaking news today?

Sunanda: Very good morning Madhu, nothing special.

Madhu: I'm facing a lot of problems in completing my assignment. The Internet is not working properly...

Sunanda: Did your uncle call?

Madhu: Uncle? Oh, not yet.

Debi: Sunanda you're so restless...

Madhu: Really mom, did daddy sleep last night?

Debi: I don't know...

Sound effect of Mobile Phone.

(cell phone is ringing in the hand of Madhu) let me see...hallo...hallo...yes, speaking...oh, uncle...yes, yes, I'm Madhu...yes daddy is here...daddy, uncle here, talk.(Gives the phone to Sunanda)

Sunanda: Hallo...yes, Alope...yes, where are you...where? Airport?

Sunanda: Next week...here...in the village...but...are you sure...you've decided...well...what.... OK ,we shall talk later on in detail.

[Music]

[Debi and Madhu look at each other, rather inquisitively, as they try to decipher the fragmentary conversations of Sunanda and Alope. But their facial contours make it clear that they're not making any sense out of those fragments and the more time Sunanda's conversation took the more curious the mother and daughter duo became.]

Telephone conversation stop

[Sunanda ends the conversation, comes back to the hall rather distractedly]

Debi: Is everything ok?

Sunanda: What? Oh, yes, yes, they all are well...

Debi: What did he say?

Sunanda: He called from the airport. He was in haste. He will call later. No, I mean, he said something else...but he didn't elaborate. He told me that he will call later and discuss it thoroughly. Well, it's surprising...Aloke wants to come back to the village.

Debi: Come back to the village...

Sunanda: what he said is also not clear to me. He said he had applied for voluntary retirement from service. And as soon as it is approved he will come back to the village.

Debi: Well, what does he really mean?

Madhu: Oh, daddy, please don't be rude with mom. For me too, coming back to the village sounds vague.

Sunanda: He wants to settle here.

Debi: He will settle here in the village!

Madhu: Uncle will sell his flat in Delhi and come back to village and not even Kolkata...

Sunanda: I don't know and I even do not know why he has taken such a drastic decision.

Madhu: Oh, it would be great fun. After so many years there will be a family re-union.

Sunanda: Yes, that would be better.

Madhu: Oh, mom isn't it natural...they're coming after so many years.

Debi: Yes and I'm also very happy

Sunanda: Why not? I've told you, what Aloke decides is irreversible. [Music]

Change Over Music

Scene -3

(One more Sunday Sunanda, Debi, Madhu, Alope, Kalyani and Arka are having their lunch together).

Arka: Oh, aunty this fish curry is excellent. After so many years I'm having the taste of a real fish.

Madhu: Real fish! What do you mean? Don't you eat fish in Delhi?

Arka: What we eat there are all frozen, tasteless rubbish.

Kalyani: Most of the things, vegetables, fruits, meat and what not... all are either frozen or come with lots of preservatives.

Alope: You know dada it's so disgusting, but we're helpless.

Sunanda: We're also not very far away. The availability of local fishes is becoming scarce day by day. People here have started eating frozen fishes, which are coming from Andhra Pradesh and Orissa. No one is safe now a day.

Alope: It's just the beginning dada. Our existence is being poisoned bit by bit...

Sunanda: You're not wrong. But what can we do? It's our fate...well; now tell me about your decision. Are all three of you going to settle here in this village?

Alope: Whether I'm really going to settle here in this village, whether Kalyani and Arka would also settle here or not and most importantly why. Why am I leaving the comfort and luxury of Delhi and coming to a remote, village where even the mobile phone network doesn't work properly?

Sunanda: Yes these are the obvious questions which are there in our minds.

Madhu: Oh, uncle, please end the mystery.

Alope: Mystery, ha, ha, ha...well said Madhu.

Debi: Oh, Alope your love for thrillers are still dominating you.

Arka: You're right aunty, papa still reads thrillers.

Alope: Thrillers...yes that's my weakness but here I've not created any hard-to-crack riddle.
That's why I've decided to leave Delhi forever.

Sunanda: Still I didn't understand anything.

Debi: Isn't it ridiculous?

Madhu: Uncle, do you mean pollution?

Aloke: Absolutely right. That's my intelligent niece.

Sunanda: Oh...but...well, if you settle here that would be great joy for us.

Debi: Oh, Sunanda what are you saying?

Sunanda: I'm sorry Aloke. Hope I've not hurt you.

Aloke: Not at all dada. Your concern is real. After so many years I now really need some fresh air and a blue sky and some open field where I can breathe... yes breathe...in the real sense.

#####[Everybody in the room is silent for a moment] #####

Sunanda: And what about Kalyani and Arka?

Aloke (Quite dreamily): Well, let me tell you the whole story... you know dada, this idea was slowly germinating in my mind during the last few years. ...You will be happy to know, Arvind has already secured an excellent job in a German company. He will leave for Germany after six months and Kalyani and I have decided for voluntary retirement. Whatever money we've earned is enough and Kalyani and Arka greatly endorsed my decision...so I thought...no more looking back.

#####[Another spell of silence in the room] #####

Sunanda: Oh, I'm a little relieved now. And tell me, did you like the plots I selected?

Arka: Uncle, the second one I liked more.

Kalyani: It's also my choice...

Aloke: Well, I don't have any objection in that plot...it's nice. Dada have you had any talk with the owner?

Sunanda: Yes, I had had some discussions with him and if you now confirm it I can proceed further regarding the price etc.

Aloke: Dada, please do it.. If you can arrange it I can make the advance payments.

Sunanda: Well, I'll take care of it and...

Madhu: If you excuse me uncle, can I say something?

Aloke: Why not Madhu...say....

Madhu: What I'm thinking ...it's not regarding individual choice. If we assess the matter from a greater perspective...we'll be quite aware of the extent to which pollution and its resultant evils such as global warming and more gravely...the disastrous climate changes are affecting us...

Arka: You are absolutely right didi. Climate change is no more a hypothesis. It's a dire reality now.

Madhu: No, no, Arka, it's ok...well, what I'm trying to say is that the immediate impact of global warming and the imminent dangers of climate change are being felt by all of us in an increasing manner. Scientists from the Intergovernmental Panel on Climate have suggested that the average global temperature could increase between 1.4 and 5.80 C by the year 2100...

Aloke: That's really alarming...

Madhu: A lot of factors are there. But the major concern is the greenhouse effect. Human activities have contributed a lot in the unprecedented rise of the greenhouse gases such as CO₂, methane, tropospheric ozone, CFCs and nitrous oxide. Research shows that since 1750 the concentration of CO₂ and methane has increased by 36% and 148% respectively.

Aloke: Oh, Madhu you're very well informed in this matter.

Debi: Don't you know Aloke she is an active member of the local science club?

Madhu: Actually that's my area of studies.

Sunanda: Yes I'm lucky, I've not have to experience it. But it's not that I'm not at all aware of the situation. I regularly read newspapers.

Kalyani: You know dada these days the smog has become intolerable.

Sunanda: It's the price of civilization...and Nature is paying the price.

Madhu: Sorry to say daddy, you're wrong...we've to pay the ultimate price.

Arka: Didi I think the factors which you just referred to are generally termed as anthropogenic factors.

Madhu: Yes, Arka you're right.

Arka: But there are some other factors too...

Madhu: Yes, the factors that can shape climate are called 'forcing mechanisms'.

Arka: And the anthropogenic factors, the human activities are of greater concern for us.

[Madhu Exits]#####

Arka: Didi is very much well-versed in this matter.

Debi: You know Arka, environment is her passion...

Aloke: Has she completed her doctoral thesis?

Sunanda: She is in the last phase of her assignment. I hope the thesis would be submitted in due course. It's our greed...

Madhu: Well, it is said – “there is a strong credible body of evidence, based on multiple lines of research, documenting that climate is changing and that these changes are in large part caused by human activities”.

Aloke: Yes and now could you tell us what would be the consequences of the climate change.

Sunanda: Yes, yes tell us. I'm also eager to know.

Madhu: Well... here it is...Climate change is the significant and lasting change in the statistical distribution of weather patterns over a period ranging from decades to millions of years.

Debi: Even in this village, nowadays the seasons are not the same as they were saying, twenty or thirty years ago...

Aloke: Well tell us elaborately what would be the consequences.

Madhu: Well uncle, – sea levels will rise; cities on coasts would flood; places that usually get lots of rain and snowfall might get hotter and drier; lakes and rivers could dry up, less water would be available for drinking, shower, agriculture and food production; many plant and animal species would become extinct; hurricanes, tornadoes and storms caused by changes of heat and water evaporation may become more common...(sighs)

Sunanda: Is it coming?

Madhu: If the global warming goes on unchecked... the end is not far away.

Debi: Why aren't we doing anything?

Arka: Many steps are being taken both regionally and globally...

Madhu:- Many non-government organisations are also trying to do their best but the chief obstacle is politics.....

Kalyani: Politics...even here?

Debi:- You have your politics here. I am going to have some coffee and snacks.

Madhu: Yes mummy. Good idea (laughing).

Sound Effects of kitchen/utensils/cups/plates etc.

- Aloke:** What was Kalyani saying sounds very complex?
- Madhu:** Not at all.
- Aloke:** But nobody wants to make any sacrifice...
- Madhu:** Yes, because 'the intimate linkage between global warming and economic vitality implicates almost every aspect of a nation-state's economy.'
- Arka:** It means economic development and global warming are extremely related.
- Madhu:** Absolute. The developing countries do also have their logic.
- Arvind:--** Madhu ! Even the developed countries are not interested to transfer the latest technologies to the underdeveloped countries, which needed it the most desperately.
- Sunanda:** I had read that UN has long recognised the important role that developing and transferring environmentally sound technologies play in combating the climate crisis.
- Madhu:** Yes papa, you are right. A successful transfer includes the knowledge needed to successfully install, operate and maintain the equipment that embodies a new technology.
- Arvind:--** It also includes the capacity to choose and adapt know-how, experiences and equipment's.
- Madhu:--** Without access to cost effective and abundant energy sources many developing countries see climate change as a hindrance to their unfettered economic development'.
- Aloke:--** But how have the poorest countries benefited from the work of the Technology Mechanism?
- Madhu :--** Uncle! Under the Paris Agreement, nations laid out a long-term vision to fully realise technology development and transfer. They agreed that the two existing branches of the UNFCCC's which are Technology Executive Committee and Climate Technology Centre and Network would work to achieve this goal. They become operational in 2012.
- Arvind:--** I think since then they have worked to guide the development and transfer of technologies.
- Madhu :--** Yes Arvind you are right. But politics of developed nations is still creating hurdle in it. One of the most contentious topics for discussion at the Copenhagen climate talks was "technology transfer",

- Arvind:--** But climate change is a different ball game, where technology transfer is a complex challenge. As companies own the intellectual property and getting companies to surrender it is no easy task.
- Kalyani:-** In my views the main hurdles are from private companies who hold patents.
- Madhu :--** Yes aunty, this is also creating big hurdle in technology transfer. Big companies are not agreeing for such freebies.
- Arvind:--** A hybrid car has more than 350 individual patents. How do you manage the licensing of each of these?
- Aloke:--** Though technology is there and ready to be transferred. Developed nations are still inventing and trialling much of it. Take biofuels: we know algae could be part of the answer to an alternative to oil. But it is at least 15 or 20 years away from large-scale reality.
- Madhu :--** Yes uncle. The focus needs to shift from technology transfer to technology collaboration. While the public sector can stimulate demand and create markets for low-carbon technologies.
- Kalyani:--** One question is in my mind. There is no silver bullet: every region faces its own climate and energy challenges.
- Madhu:--** In the developed world, most clean energy technology is developed for use with existing electricity grids. Yet there is no grid in much of the developing world. In Africa, how do you replace millions of diesel generators with solar photovoltaic? In India, how can you drive mass household uptake of solar thermal and cooling for cleaner water and refrigeration?
- Sunanda:--** These problems are best solved by the academic and business brains of the nations and regions they affect, with the backing of international finance. Creating local economic opportunity will encourage the private sector to engage and drive change.
- Aloke:--** The next decade is crucial in reducing global carbon emissions. If we continue to pursue the impossible dream of technology transfer instead of collaboration, we will let time slip through our fingers and progress will be slow and haphazard.
- ##### Sound Effects #####
- Debi:--** Hello! Your coffee and snacks are ready (laughing).
- Aloke:--** (Laughing) Bhabi Ji, this is your magic. Everything is ready at a very notice.
- Madhu:--** Uncle you are hundred percent right. Let's enjoy our coffee and discussion side by side.

- Aloke:--** Hundreds of international initiatives exist to promote natural resource sustainability and poverty alleviation in developing countries.
- Sunanda:--** Such a partnership could build on the work of existing institutions and be supported by a network of regional science foundations, national business incubators, and investment de-risking funds
- Madhu:--** Services they could provide include but are not limited to: business plan support, networking facilitation, access to international venture capital and supply chains, pitch training, finance training, access to market research, office space, facilitation of technology transfer, and negotiation of IP licenses.
- Arvind:--** Incubators could support and enhance the pipeline quality of existing green technology transfer mechanisms such as the UNFCCC Technology and Clean Development Mechanisms.
- Aloke:--** Large dedicated funds can encourage private investment in developing country projects or in companies that meet specified social and environmental criteria. In addition they can provide incentives to IP developers to share patent and technology implementation information. A risk capital fund would provide development-oriented financial instruments to investors and project developers for companies interested in deploying innovative technologies.
- Madhu:--** Uncle, being a Banker you understand better.(Laughing).
- Sunandha:--** Are We Doing Enough to Support Technology Transfer to Developing Countries?
- Madhu:--** Technology transfer holds great potential to improve the health and livelihoods of people living in poorer countries
- Arvind:--** For this the most important thing is that developed countries Members should provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country.
- Madhu:--** Some indicators have to be been agreed among the countries. Till date there is no shared agreement about what is meant by a “sound and viable technological base”.
- Alok:--** It’s a very complex issue.
- Aloke:** As it is war like situation and we should take it at war footing.
- Madhu:** Yes, a war almost and there is another major area of disagreement.
- Aloke:** What’s that?
- Madhu:** ‘Among the countries of the world, disagreement exist over which greenhouse emission metrics should be used, like total emissions per year, per capita

emissions per year, CO2 emissions only, deforestation emissions, livestock emissions or total historical emissions.’ Blame games are going on with tremendous severity.

- Arka:** Blame games are going among the developed and under developed countries.
- Madhu:** Yes, the developing countries blame the developed countries for this global crisis
- Sunanda:** Are not there other sources of energy which can replace the rampant use of fossil fuels?
- Madhu:** Yes there are...like solar, wind, bio diesel etc.
- Debi:** Why aren't we using those?
- Arka:** I think most of these alternative energy sources have not yet been developed properly and most of them are still in a very nascent stage.
- Madhu:** Not only that, the most advanced technologies has been developed and exists in the developed world.
- Aloke:** So it's another war between the developed and the developing countries.
- Madhu:** You're not wrong uncle. listen to this... 'as of 2010, over 91% of the world's energy is derived from fossil fuels and non-carbon-neutral technologies
- Arka:** Didi you've a very well researched document in your possession.
- Madhu:** Oh, Arka, thank you.
- Sunanda:** So what we're doing actually is research and information gathering and no one is doing what should be done with utmost priority.
- Madhu:** Don't be so frustrated daddy. The UNFCCC ,i.e., the United Nations Framework Convention on Climate Change is trying to do its best. Though they've not yet been able to achieve any significant progress in this matter and disagreement between the countries has not yet been resolved yet attempts are being undertaken to reach consensus.
- Debi:** We can also contribute a little.
- Arka:** In this war, aunty, nothing is little. All countries are quarrelling...we can initiate the desired change...
- Madhu:** Yes Arka, and there is another interesting fact...amidst all these hullabaloo of the developed and the developing nation. In fact, as part of the 2010 Cancun agreement, 76 developing and developed countries have made voluntary pledges to control their emission of greenhouse gases.

Aloke: Let it be everybody's prayer.

Sunanda: No Aloke let it be everybody's resolve.

Aloke: Yes dada, everybody's resolve... let not allow this beautiful planet to perish.

Arka: Yes, you're right. Look daddy it's almost evening out there and how colourful the sky has become...

Kalyani: Let me see, let me see...oh, how beautiful ... as if a Van Gogh painting.

Madhu: Well said aunty... Van Gogh.

Arka: Didi lets go for a walk around the village.

Madhu: Why not Arka...lets go.

Debi: Wait Madhu we're also going.

Aloke: Yes, yes, but let's have one more cup of tea.

Debi: Why not? It would be ready, just a minute.

#####(Debi Exits) #####

Closing part of the Music/Title Song]

[Sunanda, Aloke, Kalyani, Arka and Madhu are seen absorbed in the evening sky outside. Slow curtain.]

Closing Music
