United Nations Sustainable Development Goals (UN SDGs)
Professor. Doctor Shiva Ji
Department of Design and Department of Climate Change
Indian Institute of Technology, Hyderabad
Key Climate Conferences & Summits: Rio 92, Kyoto 95, Paris 15, COP26
Part 4

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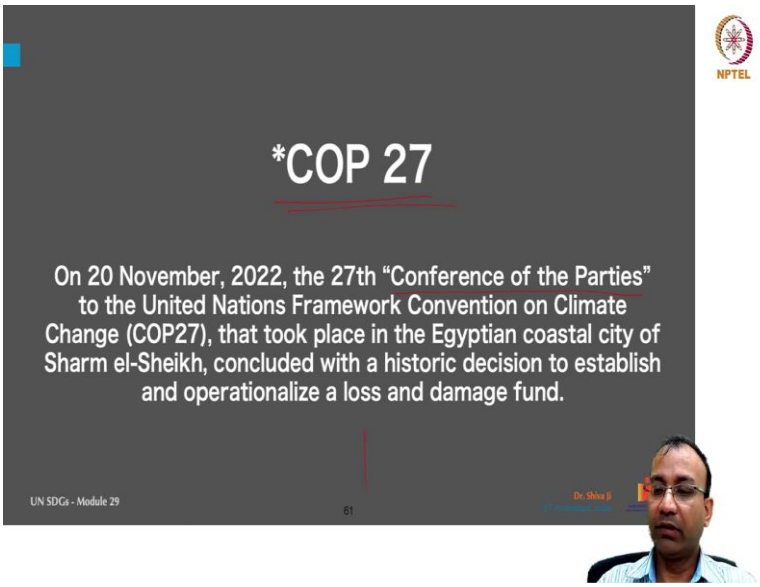

So, on this next unit COP27. On 20 number 2022, the twenty seventh Conference of the Parties to the United Nations Framework Convention on Climate Change COP27, that took place in the Egyptian coastal city of Sharm el-Sheikh then concluded with the historic decision to establish and operationalize a loss and damage fund.

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So, this is COP27. It happened in Egypt in the month of November last year 2022.

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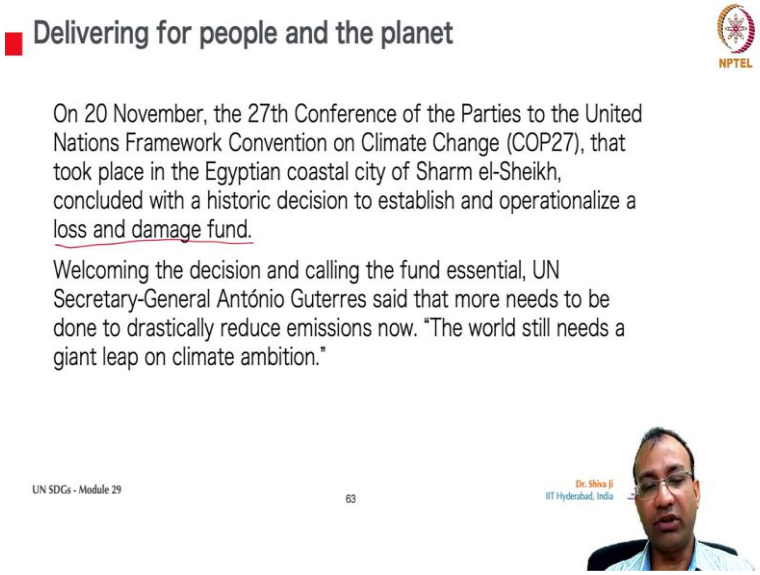

Delivering for the people and the planet. On 20 November, the twenty seventh Conference of the Parties to the United Nations Framework Convention on Climate Change COP27 that took place in the Egyptian coastal city of Sharm el-Sheikh concluded with the historic decision to establish and operationalize a loss and damage fund. Welcoming the decision and calling the fund essential, the UN Secretary General Antonio Guterres said that most needs to be done to drastically reduce emissions now. The world still needs a giant leap on climate ambition.

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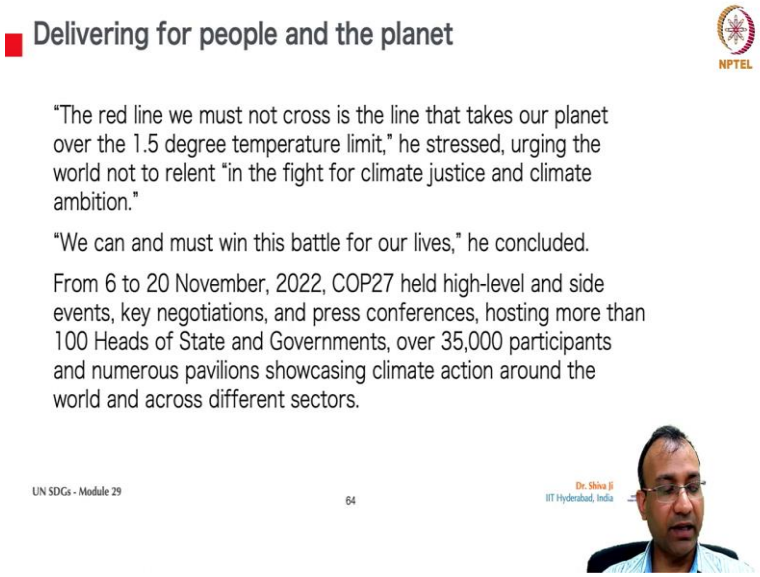

The red line we must not cross is the line that takes our planet over the 1.5 degrees temperature limit. He stressed, urging the world not to relent in the fight for climate justice

and climate ambition. We can and must win this battle for our lives, as he concluded. From 6 to 28 November 2020, COP27 held high level and side events, key negotiations and press conferences, hosting more than 100 heads of state and governments, over 35,000 participants and numerous pavilions showcasing climate action around the world and across different sectors.

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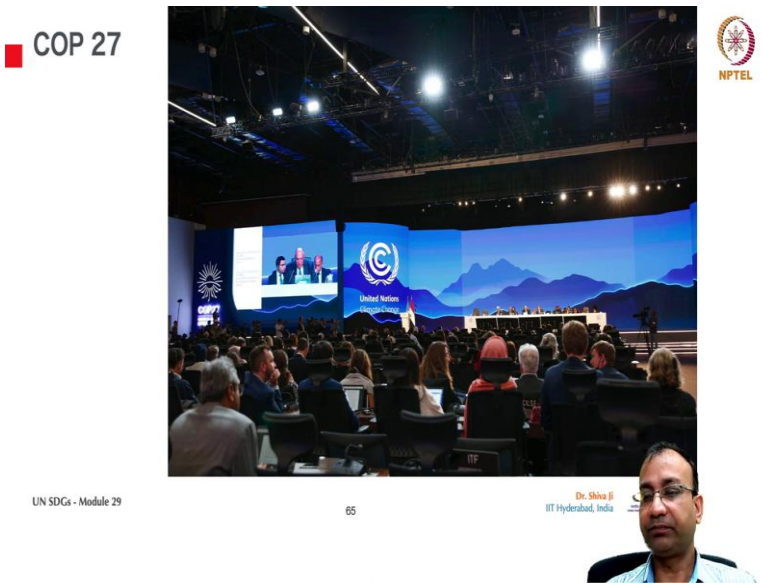

This is a picture from COP27.

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As the Sharm el-Sheikh Climate Change Conference COP27 countries came together to take action towards achieving the world's collective climate goals as agreed in the Paris Agreement and the convention. The conference took place from 6 to 28 November 2022,

heads of states and governments attended it. More details, you can refer this link, here you will have a lot of details.

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So, let us see some snapshots, like how these impacts are like changing over the period of time with consistent effort. So, this is this report, you can refer on its website, UNAP's work on climate action, if you search you will find it. So, a call to action, to achieve one gigatons of emissions reductions by forest, from forest by 2025. With that purpose, making good on the Glasgow climate pact, a call to action to achieve one gigaton of emissions reduction by forest by 2025.

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So, I am just giving you the summary of this report, executive summary, we are in an existential crisis, but forest can deliver for people and climate. So, definitely, forest if you see are the major resources and resource givers for our and every, almost every species sustenance, which is labeling on the land. So, the climate change and biodiversity crisis combined with challenges presented by wars, food insecurity and pandemics are pushing us to the brink.

Fortunately, actions to protect sustainably manage and restore forests can deliver cost effective climate change mitigation at scale. These actions can also reverse declines in biodiversity and enhance resilience to climate change. Indigenous peoples and local communities recognized as the most effective stewards of forest often play a key role in achieving these outcomes.

Forest based actions can make an essential contribution to meeting the ambition of the Paris Agreement with potential to provide nearly 27 percent of the solution to help avoid climate catastrophe. The gigaton milestone is an essential tool to measure progress towards climate and natural goals.

Despite widespread recognition that we need forests to fend off the worst of the climate crisis, financing the forest-based solutions such as REDD plus, REDD plus, you can check for more details, has been insufficient and slow moving to help evaluate financial commitment for emissions reduction from forest the green gigaton challenge set a goal of mobilizing funds to pay for the equivalent of 1 gigaton of high integrity emission reduction from forests between 2020 to 2025, and yearly thereafter.

This provides a much needed midterm milestone to assess progress towards meeting a range of goals and commitments of forest and climate by 2030. We are not yet on track to meet the milestone. So, as you may be aware of this, like all of these efforts, though, it is bearing positive results, but it is not enough. It is not sufficient to thought and bring back normal position of the climate. So, that is why these efforts must go on with a much faster rate.

And unmistakable incentive in the form of an increased forest carbon price is needed. Upfront investment in REDD plus readiness and implementation must continue and be scaled up. Integrity is key to ensuring real robust emission reductions. There is no progress towards equity, forest countries are at the heart of delivering needed emissions reduction and IPLCs have a key part in this process.

Lastly, although more than half the time to meet the gigaton milestone has passed, less than one quarter of the needed commitments have been made. We urgently need to scale up action and finance for forest-based mitigation to achieve this milestone and avoid catastrophic climate change. If we succeed in this goal, vital targets for climate and nature remain within reach.

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Another report from United Nations Environment Program, it is available over the internet on their website, I would suggest reading. This talks about adaptation gap report 2022. So, the title says too little too slow climate adaptation failure puts world at risk.

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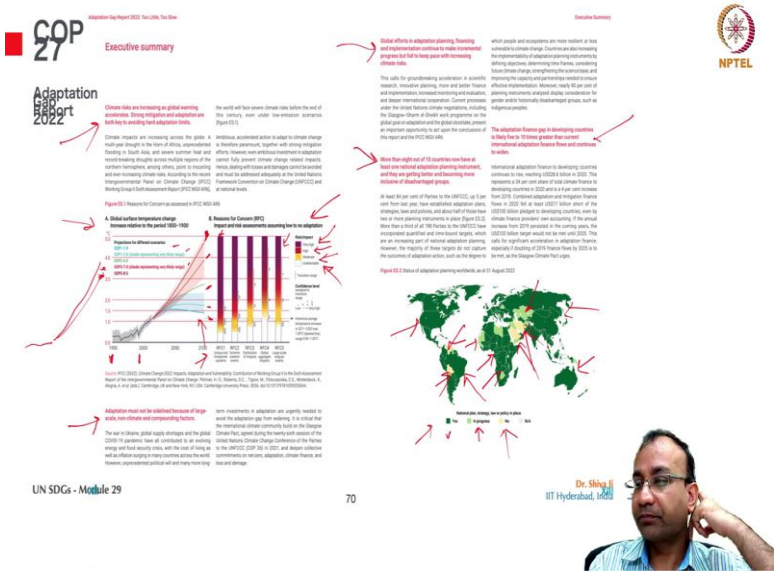

So, some snapshots I am giving you just the executive summary rest of the report I would suggest reading for you. Climate risks are increasing as global warming accelerates. Strong mitigation and adaptation are both key to avoiding hard adaptation limits. So, in this figure, you can see global surface temperature change increase relative to the period 1850 to 1900s. So, you can see here 1950 up to 2000 this rate of change has been little, gradual, but suddenly it took actually this turn, it took a spike.

So, in this you can see different scenarios are drawn through different colors. So, SSP5 8.5 is shown with this one the sharpest, the steepest one, the highest one and then gradually the lower ones like shade representing very likely range, SPP3 7.0 is here and then this green one is here, (())(08:19) one is here and blue one is here, these ones. So, definitely we want this blue curve, so that by the end of this century this can be controlled.

Well, reasons for concern you can see in this graph over here, impact and risk assessment assuming low to no adaptation. So, risk very high is shown in this by this color and high by red color, yellow by yellow color and undetectable in white. So, gradually you see RFC 1, unique and threatened systems, the concentration of this violet is very high. And gradually with RFC 2, RFC 3, RFC 4, RFC 5, that is reducing. So, this is what is the preferred one.

Adaptation must not be sidelined because of large scale non-climate and compounding factors. Global efforts in adaptation planning, financing and implementation continue to make incremental progress but fail to keep pace with increasing climate risks. More than 8 out of 10 countries now have to list at least one national adaptation planning instrument and they are getting better and becoming more inclusive of disadvantaged groups.

They adaptation funds gap in developing countries is likely 5 to 10 times greater than current international adaptation finance laws and countries to widen. So, you can see here in this picture national plan strategy law or policy in place, yes, it is shown by green, in progress light green, no is shown in yellows. So, you can see very few countries are in yellow and a very few again are in light yellow but most of the planet fortunately is in the green color.

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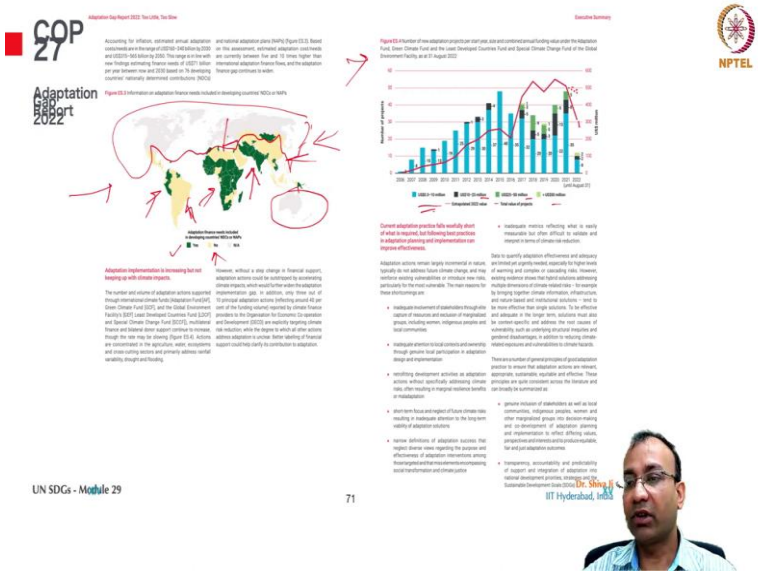

Next in this picture we see adaptation finance needs included in developing countries NDCs or NAPs. Yes, that information is given by very few countries you can see over here in fortunately India being one of the countries, and many from Africa, a few from South America. And mostly like I have said no, from South America, and there is China, maybe from this side of Africa and Middle East and somehow this part either data is not available or there is no communication, which is unfortunate, we do not know what is happening, what do they say.

So, this report does not have data on this. In this illustration in this table, you can see number of new adaptation projects per start year, size and combined annual funding, value under the adaptation fund, Green Climate Fund and the least developed countries fund. So, you can see over the years it has risen, but somehow in this year, year 2022 it came down. So, ideally, it should, this should go up, because these are new adaptation projects, so they should be more and more like adaptation projects.

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In this figure, we see an architecture of risk reduction, including principles, actions and outcomes that can be used as a basis for addressing actual or likely adaptation effectiveness. So, the first vertical we have principles, actions are here, and then outcomes on these three columns. So, in principles, we have group practices based on adaptation, principle, inclusion, co-production, transparency, credibility, devolved and adaptive governance, local ownership, knowledge and integration, avoid maladaptation, addressing future risks, minimizing mitigation and development tradeoffs, flexible addressing structural drivers and of vulnerability.

Actions, there are three mitigation and adaptation actions, adaptation action to reduce exposure to hazards, and actions on structural drivers of vulnerability. In outcomes, we have reduced hazards, reduced exposure, reduced vulnerability, finally, enhancing resilience, reduce risk and improve human ecosystem and wellbeing at planet level. In this figure, we have aligning climate change mitigation or adaptation actions, differences, synergies and tradeoffs.

So, you can see with the differences these adaptations and from here it is going in the mitigation's tradeoffs. So, different knowledge and information required to inform policy making, distinct stakeholders, distinct distributed impacts. In the tradeoffs, we have mitigation actions that increase exposure and vulnerability to climate change. I would recommend like reading on this report.

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I have taken another report, this is also from a UN Environment Program Emission Gap Report 2022. I would suggest reading of this, it talks about closing window, climate crisis calls for rapid transformation of societies.

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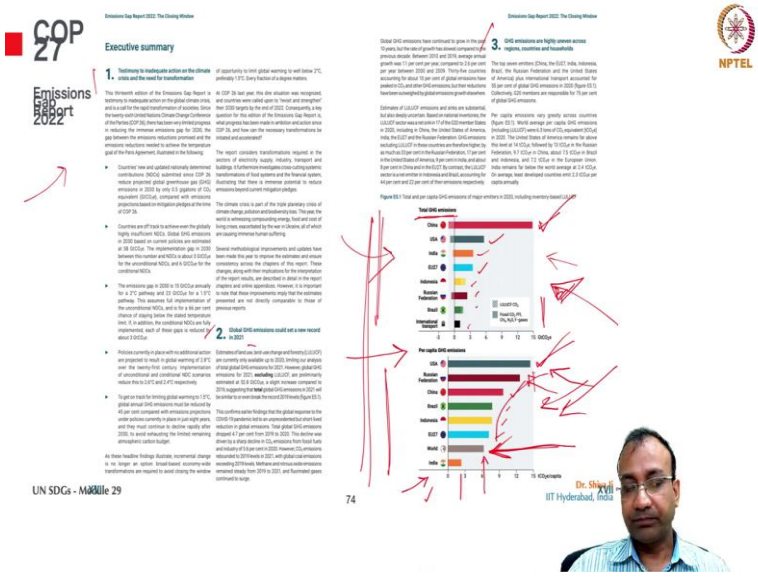

So, I am just giving you the executive summary of this report. You can read more for informed decision. So, the first point talks about testimony to inadequate action on climate crisis and the need for transformation that we have established already earlier. Point 2 talks about global GHG Emission could set a new record in 2021. Point 3 talks about GHG emissions on highly uneven across regions, countries and households.

Those some listing is given over here you can see it is very important in figure for information. It talks about total GHG emissions. So, the total GHG emission is highest by China, then US, then India, then EU27, Indonesia, Russian Federation, Brazil, International Transport. But the moment you go to check the per capita GHG emission, the whole scenario actually changes.

USA comes at the top most you can see almost 15 terms of CO2 per capita very high at the world level the highest node coming from United States of America that is why these two actually tables are essential to see. Even if some of the countries are producing high volume of GHGs but per capita consumption per capita GHG is coming from like some of these countries USA topping that then Russian Federation and then China.

So, China is the largest emitter as well as third largest per capita consumer, per capita emitter also of these GHGs. Brazil coming forth, Indonesia, EU27, overall world and then India you will see is here way below the words average that is why this table is very important the world average extends somewhere above 6 and the Indian average in Indian per capita is a little less than 3 I think the two point something and over here and USA topping by almost 15 tons of CO2 per capita.

So, this shows this illustration actually shows the disparity in emissions. So, which country needs like to plug in more is given right over here. So, India fortunately is doing wonderful, because its per capita emission is way below world’s average. But we know which countries needs, like the countries which are definitely above the world's average they must control it at any cost.

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Four point, despite the call for countries to revisit and strengthen their 2030 targets progress in COP26 is highly inadequate. So, you can see this table.

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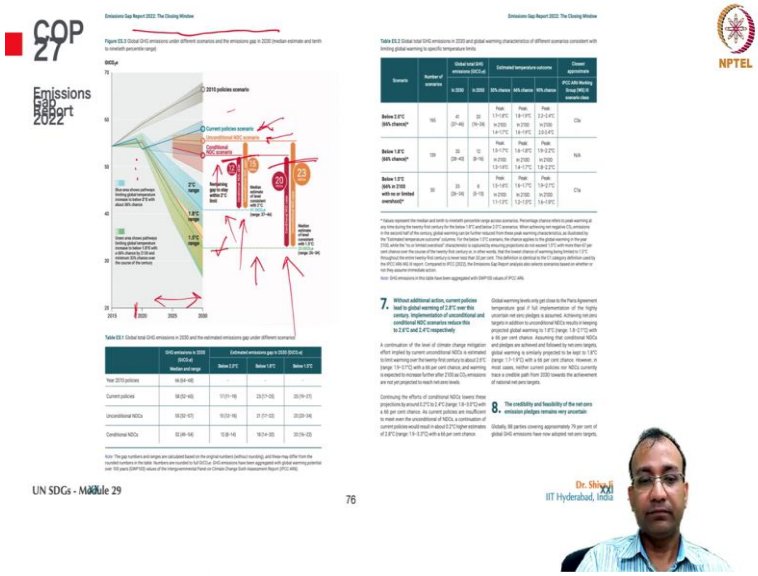

This figure actually talks about global GHG Emission under different scenarios and the emission gap in 2030. So, it is a projection-based testing you can see this real data up to like this here and then this part is the projection one, which talks about if it is under considerable range 1.5 degrees centigrade, then what will happen. And if it goes as it is, then what happens.

So, current policy scenario is shown in blue, unconditional NDC scenario shown here in yellow and then REDD conditional NDC scenario in red, then we have this blue light dotted

blue and this green one. So, this is what the world desires saving more and more. So, these are the numbers you can see on the side. Till blue what is needed, what is there. And for green, what is there.

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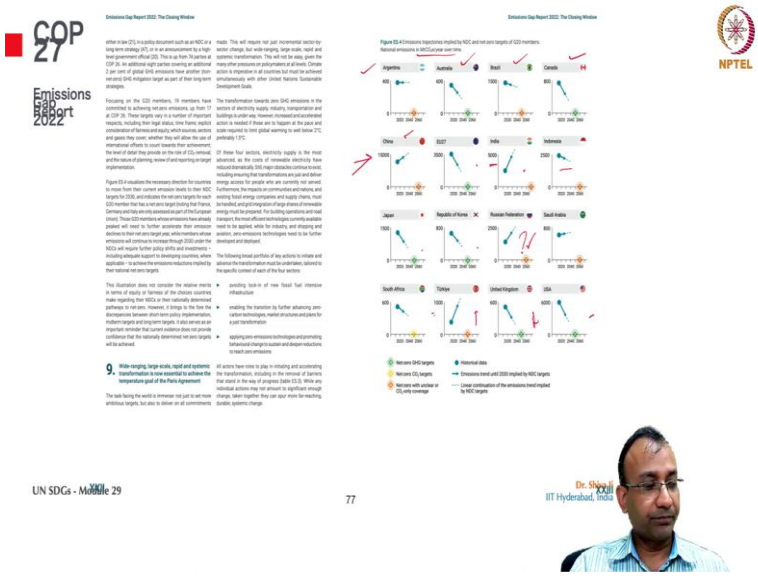

This figure talks about emissions trajectories implied by NDC and Net Zero targets of G20 members. So, you can see Argentina, Australia going down, Brazil going down, Canada going down, China going up. And the volume is also very high if you see this number, this is 15,000 here. So, national emissions in metric tons CO2 per year over time.

EU it is coming down, India also it is going up but stands at 5000, Indonesia is coming down, Japan coming down, Republic of Korea is coming down, Russian Federation is going up, Saudi Arabia also slightly going up, South Africa coming down, Turkey it is going up sharply 1000 and the scale of this is here 1000, United Kingdom is coming down, USA also it is coming down.

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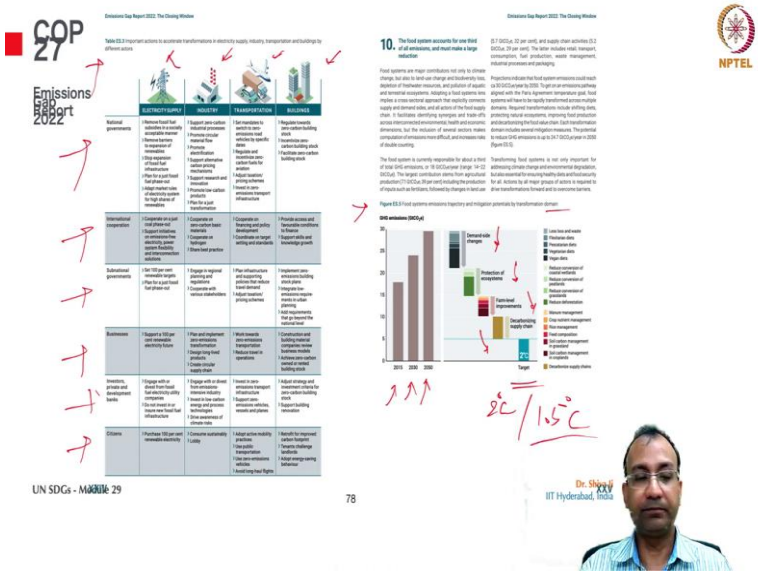

So, in this table, you will see important actions to accelerate transformation in electricity supply, industry, transportation and buildings by different actors. So, national governments, international cooperation, subnational governments, businesses, investors, private and development banks and common citizens. So, electricity supply on this hand on this column we have industry, transportation and buildings.

This figure talks about food systems emissions trajectory and mitigation potential by transformation domain. So, this is this GHG emissions, it looks like it is going to rise. So, demand side changes you can bring down, protection of ecosystems by that we can bring it down, farm level improvements you can bring it down, decarbonizing supply chain also we can have to bring it down to the level of two degrees centigrade or 1.5 degrees centigrade target.

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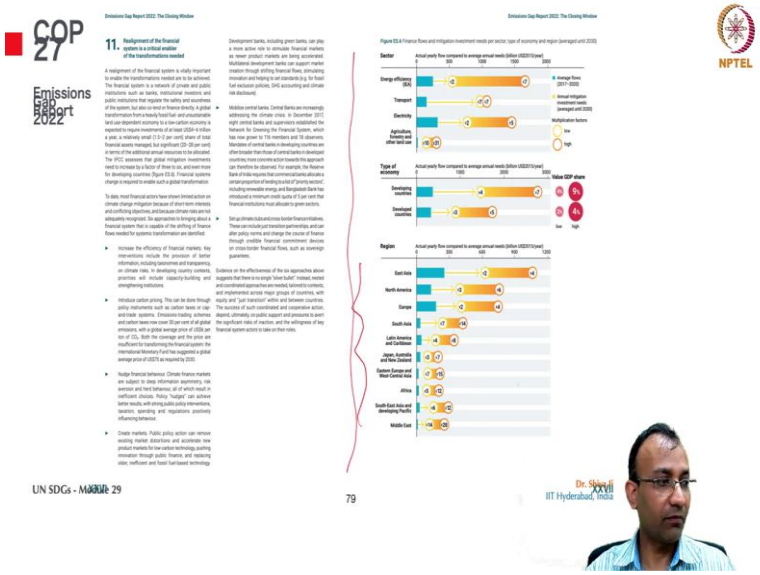

Then, lastly, we have this here finance flows and mitigation investment needs per sector type of economy and region average. So, you can see the sectors are here and regions are given over here.

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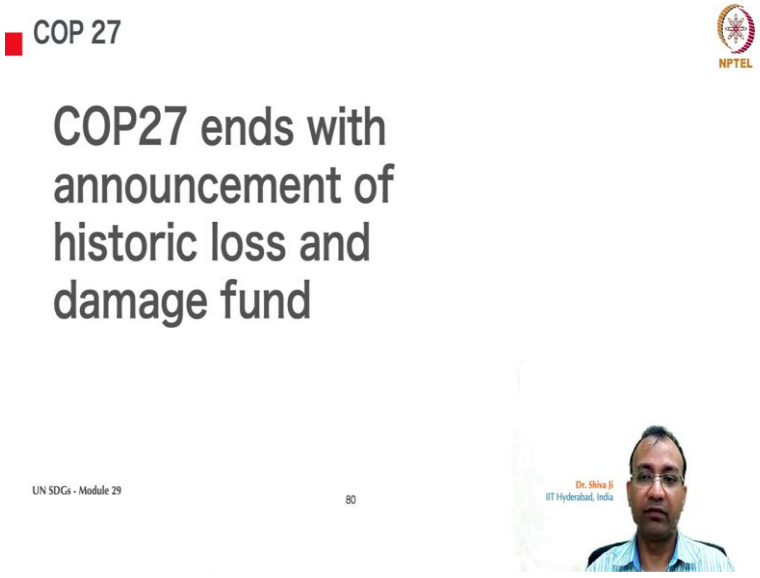

COP27 ends with announcement of historic loss and damage funds. So, this is it with the it ends with.

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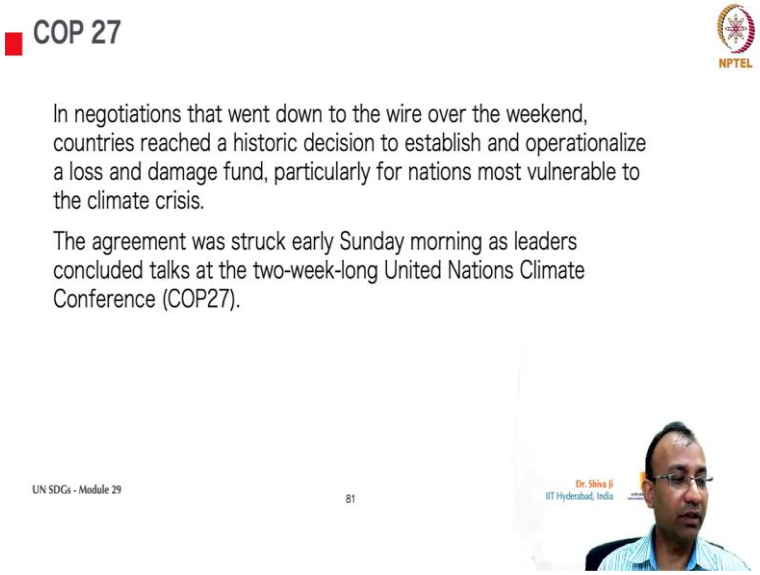

In negotiations that went down to the wire over the weekend countries reached a historic decision to establish and operationalize a loss and damage fund, particularly for nations most vulnerable to the climate crisis. The agreement was struck early Sunday morning as leaders concluded talks on the two-week-long United Nations Climate Conference COP27.