Perspective

Code Red for Humanity: Global Climate Conference COP26 in Glasgow



Scotland prepares for COP26

Code Red for Humanity

UN scientists warn of worsening global warming. The authoritative Intergovernmental Panel on Climate Change (IPCC) reports which calls climate change clearly human caused and unequivocal and an established fact makes more precise and warmer forecasts for the 21st century than it did last time it was issued in 2013. World leaders agreed in 2015 to try to limit warming to 1.5° Celsius above levels in the late 19th century because problems mount quickly after that. The world has already warmed nearly 1.1° Celsius since then. The report tells us that recent changes in the climate are widespread, rapid and intensifying, unprecedented in thousands of year. This was said by IPCC Vice Chair Ro Barrelt, Senior Climate Advisor for the US National Oceanic and Atmospheric Administration. As the planet warms places will get hit more not just by extreme weather but multiple climate disasters at once as per report. That's like what's now happening in

the Western US where heat waves, droughts and wildfires compound to damage. "Extreme heat is also driving massive fires in Greece and Turkey. Some harm from climate change – dwindling ice sheets, rising sea levels and change in the oceans as they lose oxygen and become more acidic is irreversible for centuries to millennia" the report said. The world is locked in to 15 to 30 cms of sea level rise by mid century said report coauthor Bobx Kopp of Rutgers University.

The Indian origin previous British Cabinet Minister Alok Sharma who was the President designate of the United Nations Climate Change Conference COP26 in Glasgow November 2021 that the meeting hosted by Britain in 2021 was the world's last chance to get a grip on climate change said in an interview that the world will face a climate catastrophe unless urgent action is agreed upon in 2021. Last year 2020 was the hottest on record, the last decade hottest decade on record, he said "I don't think we are out of

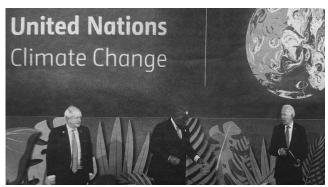
time but I think we are getting dangerously close to when we might be out of time". COP26 ended with almost all nations agreeing to a compromise aimed at keeping a key global warming, target alive but which contained a last minute change that watered down language COP26 leaves us where we were before. Pledges were very much in the future. Those NetZero by 2050-2060 pledges made by leaders who won't be alive when pledges become due.



Ex-British Cabinet Minister Alok Sharma President designate of UN Climate Conference COP26 declares the end of the conference on Saturday 13 November 2021.

While calling the report "Code Red for humanity". UN secretary General Antonio Guterres kept a silver hope that world leaders could still somehow prevent 1.5° Celsius of warming which he said is "Perilously close".

American President Joe Biden said at the COP26 Glasgow summit "None of us can escape the worst of what's yet to come if we fail to seize the moment seriously. UN's top human rights official and its President Joe Biden's climate envoy called for countries to step up the fight against global



The British Prime Minister Boris Johnson, Guest of COP26 the President of Kongo, Felix Tshisekedi and US President Joe Biden pledged with 100 countries to stop deforestation till 2030.

warming describing it as an issue of sheer survival of humankind. We are now already just about 1.2°C said by Global body's High Commissioner Michelle Bachelet. US Climate envoy John Kerry noted China, the world's biggest polluter is alone emitting about 80% greenhouse gas. Our Prime Minister, Narendra Modi demanded that people should stop treating nature as a toilet. He commented that by continued use of fossil fuel "we are digging our own graves "and he targeted NetZero emissions by 2070. India being the third largest emitter of greenhouse gases. Its ambitious target is 450 GW of renewable energy by 2030.

Commitment of different countries at COP 26 Impact of Warming

Nobel laureate and Tibetan spiritual leader Dalai Lama said "global warming is an urgent reality". None of us is able to change the past but we are all in a position to contribute to a better future. Our ancestors viewed the earth as rich and bountiful which it is, but what's more it is our only homes. We must protect it not only for ourselves but also for future generations and for the countless species with which we share the planet. He said Tibetan plateau the largest reservoir of snow and ice outside the north and the south poles had often been called the third pole. Tibet is the source of some of the world's major rivers which include Brahmaputra, the Ganges, the Indus, the Mekong, the Salween, the Yellow River and the Yangtze. These rivers are source of life for nearly two billion people across Asia. The melting of Tibet's numerous glaciers; the damming and diversion of rivers and widespread deforestation exemplify how ecological neglect in one area can have consequences almost everywhere. We human beings are the only creators with power to destroy the earth but we are also the species with the greatest capacity to protect it. Leaders must take collective action to address the emergency and set a time table for change, he said.

Bhutan is already a carbon-neutral country. Red Cross Federation said climate and weather related disasters have caused more than 30 million people to flee their homes in 2020 three times more than the no. of people displaced by war. It was hyped up as the last chance for humanity to preserve its habitat. Similar slogans echoed since the 1st COP in Rio de Janeiro almost 30 years

before. The Glasgow gathering for conversation some of the biggest offenders have known for more than six decades that their relentless quest for oil, coal and gas deposits and deployment of fuels entailed deleterious environmental consequences. The damning information was successfully sequestered for a long time. Remarkably until the Glasgow conference the emission reduction agenda all but ignored fossil fuels. When it came formally pronouncing a long overdue death sentence to coal, India and China stood in the way. The delayed final declaration was eventually watered down to seeking phase down rather than phase out of coal (18..11.2021, The Statesman).

The year 2030 is the target year for the world to achieve all 17 Sustainable Development Goals (SDG) set by United Nations. In addition to the SDGs, 2030 is also the year by which by all countries party to the Paris Agreement on climate change must keep the global temperature rise below 1.5°C, as well as to fulfill the historical emitter's pledges of US \$100 million per year to the developing countries on Adaptation. The COVID 19panndemic has clearly demonstrated what a global crisis looks like as well as the need for all countries to work together with firm commitment to effectively combat it. Every single one of us needs to consider ourselves the citizens of our exquisitely beautiful blue planet mother earth first, our relatives, friends and families along with people of our countries second. Almost all the major problems facing humanity because of anthropogenic activities now are global in nature and cannot be solved within only our national boundaries anymore. Hence we all need to think globally while acting locally.

Another important shift needed in our thinking is for every sector and organization to make it their own responsibility to actively participate in tackling climate change rather than simply leave it to government. This is now known as "whole-of-society" approach, taken to tackle major issues. This means that every organization from schools, colleges, universities, industries from NGOs to media houses have to undertake their own analysis of what can be done regarding climate change and translate into action as much as possible.

Another important task is to confront the forces who are causing the problems which include fossil

fuel companies as well as certain governments and media outlets that protect them. These force of status quo, now need to be challenged at every level. The task is difficult but has to be achieved.

The world meteorological organization reported on 25th October 2021 that greenhouse gas concentration hit a new record in 2020 and increased at a faster rate than the annual average for the last decade despite a temporary reduction of 5.6% of CO₂ emission during pandemic related lock downs. Amazon rainforest has gone from a carbon sink to a source of CO₂ due to deforestation. CO₂, CH₄, NO were all above levels in the preindustrial area before 1750 when human activities started disrupting earth's natural equilibrium. The report was at the current rate of increase in greenhouse gas concentration. We will see a temperature increase by the end of this century for in excess of the Paris Agreement targets of 1.5 to 2° degree Celsius above preindustrial levels. The global average of carbon dioxide concentrations hit a new high of 413.2 parts per million from 280 ppm up to the 18th century 1750 according to WMO report.

Severe tornadoes wreaked major damage in multiple states of USA on the 10th august 2021 tearing through a candle factory in Kentucky, an Amazon facility in Illinois, a nursing home in Arkansas and numerous homes and buildings. Dozens of death are feared and several were confined on 11th August 2021.

2020 was the warmest year on record. 2021 will most likely replace it. Each passing year is breaking the record of the previous year. The last seven years are the warmest seven years on record and their impact on the global environment is now clear. In May 2021 a large chunk of ice calved from the Antarctic ice sheet and became the world's largest floating iceberg named A-76. This iceberg is three times the size of Delhi. A-76 may not directly contribute to sea level rise but is certainly a hazard to maritime trade.

Hurricane Ida in USA rapidly intensified into dangerous category 4 going from top winds of 185 kph to 220 kph a few hours later in August 2021 comparisons to the August 29, 2005, landfall of Katrina weighed heavily on residents bracing for Ida. A category 3 storm Katrina was blamed for 1800 deaths as it demolished ocean front home



Antarctic Ice Melt

in Mississippi and caused catastrophic flooding in New Orleans.

Earth gets hotter and deadlier: Trillions of tons of ice have disappeared over the period of COP conventions for 29 years, the burning of fossil fuels have spewed billions of tons heat trapping gases into the air and hundreds and thousands of people have died from heat and other weather disasters stoked by climate change statistics show. The yearly global temperature has increased almost 0°6° Celsius based on multiyear averaging, according to the US National Oceanic and Atmospheric Administration (NOAA). Earth has warmed more in the last 29 years than in the previous 110. Since 1992 the world has broken the annual global high temperature record eight times.



Wildfire in Australia

In Alaska the average temperature has increased 1.4° Celsius since 1992 according to NOAA. The arctic has been warming as fast as the globe as a whole, but now has jumped to three times faster in some seasons, according to the

arctic Monitoring and Assessment Program. The heat is melting earth's ice. Since 1992 earth has lost 36 trillion tons of ice, according to calculations by climate scientist of University of Leeds. With more ice melt in the ocean and water expanding as it warms, the world's average sea level has risen about 3.7 inches (95mm) since 1992, according to the University of Colorado.

Wild fires in the United States have more than doubled from 1983 to 1992. Wild fires consumed an average of 2.7 million acres a year. From 2011 to 2020 the average acres was up to 7.5 million acres according to the National Interagency Fire Centre.

India is among four South Asian countries where children are most at risk of the impacts of climate change threatening health, education and protection according to a new UNICEF report as of August 2021. Pakistan, Bangladesh, Afghanistan and India are among four South Asian Countries where children are at extremely high risk of the impact of climate crisis with a ranking of 14th, 15th, 25th and 26th respectively. Children Climate Risk Index (CCRI) has placed India as one of the extremely high risk countries with flooding and air pollution being the repeated environmental shocks leading to socioeconomic adverse consequences for women and children. (It is estimated that more than 600 million Indians will face acute water shortages in the coming years while at the same time flash-flooding is to increase significantly in the majority of India's urban areas once the global temperature increase rises above 2°C). Twenty one of the world's 30 cities with the most polluted air in 2020 were in India. India's neighbors Nepal is



Dams burst in northeastern Brazil as region hit by floods

ranked 51st and Sri Lanka 61st, Bhutan is ranked 111th with children at relatively low risk.

Heat wave in India's three regions is likely to hit health, agriculture, economy as revealed in a recent report by the India, Mahamana Centre of Excellence in Climate Change Research (MCECCR) at Banaras Hindu University.

Bangladesh after India: Bangladesh is one of the 50 climate vulnerable countries of the world and currently leading the Climate Vulnerable Forum. As per the director of International Centre for Climate Change and Development (ICCCAD) at Independent University Bangladesh (IUB) in Dhaka. Bangladesh says Bangladesh is the most climate vulnerable country and its delta landscape is prone for flooding, cyclones regularly hit the coast. In cyclone Mahan in 2020 some 3 million people fled into shelters and survived due to improved cyclone warning system. In 1991 a comparable cyclone killed over 100,000 people. Bangladesh managed to radically reduce the death toll but on the impact on livelihood was still devastating. Not only individual homes were destroyed, entire villages were wiped out. Fields were flooded with saline water, so farming has become impossible there. Farmers lost their livestock, fisher folk lost their boats; artisans lost their workshops. Masses of people therefore moved to urban areas and very many of these climate refugees still cannot return home. After that Yaas, the next cyclone has struck, causing additional harm.

Australia is experiencing widespread rapid climate change not seen thousands of years and may warm by 4°C or more this century, according to a highly anticipated report by the Intergovernmental Panel on Climate Change (IPCC). The assessment released on 9th August 2021 also warns of unprecedented increases in climate extremes such as bush fires, floods and droughts. The report confirms the effects of human caused climate change have well and truly arrived in Australia. This includes in the region of the East Australia current, where the global effects worsen significantly over the coming years and decades.

UN Climate Report

The 3000-plus-page report from 234 scientists said warming is already accelerating sea level

rise and worsening heat waves, droughts, floods and storms. Tropical cyclones are getting stronger while arctic sea ice is dwindling in the summer and permafrost is thawing. All of these trends will get worse the report said.

Africa's rare glaciers to disappear in the next two decades because of climate change a new report warned on 19th October 2021 amid sweeping forecasts of pain for the continent that contributes least to global warming but will suffer from it most. The report from the World Meteorological Organisat6ion and other agencies, released ahead of the UN Climate Conference in Glasgow, UK that starts on October 31, is a grim reminder that Africa's 1.3 billion people remain extremely vulnerable as the continent warms more and at a faster rate, than the global average. And yet Africa's 54 countries are responsible for less than 4% of global green house gas emissions.

The new report seizes on the shrinking glaciers of Mount in Kilimanjaro mount in Tanzania. Their current retreat rates are higher than the global average. If this continues it will lead to total deglaciations by the 2040, it says.

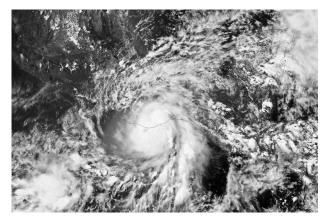
Massive displacement, hunger and increasing climate shocks such as droughts and flooding are in the future, and yet the lack of climate data in parts of Africa" is having a major impact "on disaster warnings for millions of people, WMO Secretary General Peleri Taalas said in October 2021.



The Sahara: Earth's largest hot desert

"Estimates of economic effects of climate change vary across the African continent, but in sub Saharan Africa climate change could further lower gross domestic product by upto 3% by 2050" Josefa Leonel Correia Sacko with the African Union Commission writes in the report.

Not only are physical conditions getting worse but also the number of people being affected is increasing. By 2030 upto 118 million extremely poor people or those living than 1.90 a day will be exposed to drought, flood and extreme heat in Africa if adequate response measures are not put in place Sacko adds. Already the UN has warned that the Indian Ocean island nations of Madagascar are one where "famine like conditions has been driven by climate changes. It says parts of South Sudan are seeing the worst flooding in almost 60 years.



Hurricane Agatha Strikes Mexico

Madagascar: Cyclone emulator crashed into the south-eastern coast of Madagascar in the last week of February 2022. Madagascar, an island off the east coast of Africa renowned for its wildlife and unspoiled natural treasures has now been hit by four major tropical storms in January 2022 killing nearly 200 people already and compounding issues of food insecurity. A drought in the south of the country left around 400,000 at risk of starvation in January 2022 according to the UN World Food Program. Cyclone Batsirai early February 2022 left more than 1220 people died and displaced 143,000. More than 20,000 houses were destroyed or damaged by Batsirai, the UN office for Coordination of Humanitarian Affairs said and more than 21000 people remained displaced. Forecasters also predicted 8 to 12 more cyclones in Madagascar region before the cyclone season normally ends in May.

Wild Fires

The report that number of wild fires globally to raise by 30% by the United Nations Environmental Programme (UNEP) and GRID - Arendal a

nonprofit environmental communication centre based in Norway has called for radical change in government's spending on wildfires and shifting their investments from reaction and response to prevention and preparedness. The report was released ahead of the resumption of 5th session of the UN Environment Assembly (UNEA 5.2) at Nairobi scheduled to start between February 28 and March 2, 2022. The report was commissioned in support of UN Programme on Reducing Emissions from Deforestation and Forest Degradation (UNREDD) an effort at increasing forests as part of climate mitigation action and the UN Decade on Ecosystem Restoration.

Climate Change and Landscape Change as per the report states that the number of extreme fire globally will raise by up to 14% by 2030, 30%by the end of 2050 and 50% by the end of century.



Canada heatwave: Several dead as temperatures soar to record high of 49.5°C in 2021

With European countries

Flooding in Venice worsens off-season amid climate change. After Venice suffered the second worst flood in its history in November 2019, it was inundated with four more exceptional tides within six weeks, shocking venetians and triggering fears about the worsening impact of climate change.

The repeated inundation of brackish lagoon water on St. Marks Basilica in summer 2021 when this never used to happen is a quiet reminder that threat has not receded. St. Mark's chief caretaker, Carlo Alberta Tesserin told the Associated Press. Rising sea levels are increasing the frequency of high tides that inundate the 1600-year-old Italian lagoon city which is also gradually sinking.

The Glasgow conference of parties (COP26) concludes on 13th November 2021 that signed the

UN Framework Convention on Climate Change seems to have generated a lot of agreements but Greeta Thunberg is still saying "There is a still very long ways to go". Having some agreement is better than nothing but the hard work is only just beginning.

The fact that the US and China (the two largest carbon emitters) actually agreed to work together on achieving 1.5°C temperature goal set out in the 2015 Paris Agreement was welcome relief on many fronts. No one seems to have found the right narrative that will unite us to confront a frightening future of climate catastrophes. COP26 showed how the story of climate warming has changed over the years. In 1972 the club of Rome built a pioneering model warming about the limits of growth. Hardly anyone believed that story. In 1988 after the hottest year on records, NASA scientist6 James Hansen declared that global warming was upon us. The next year the UN established the Intergovernmental Panel on Climate Change (IPCC) to determine the scientific basis of climate change and its political and economical impacts.

Despite the threats ahead to the African continent, the voices of Africa have been less represented than richer regions at global climate meetings and among the authors of the crucial Intergovernmental Panel on Climate Change (IPCC) scientific assessments. African participation in IPCC has been extremely low according to Future Climate for Africa, a multicountry research program.

For two decades the scientists warned of climate disaster, whilst economics and business treed delaying action because they thought that markets alone and economic growth plus technology would solve everything. As more and more evidence arrived, public became more concerned but businesses still saw climate warming as a cost rather than opportunity. During this period, the US missed its global leadership when flip-flopped on climate warming. The Kyoto Protocol was the first global agreement to reduce greenhouse gases but President George W Bush reversed it in 2001; claiming that it would hart US economy. President Obama signed on the Paris agreement in 2015, only for President Trump to withdraw. The UNIPCC Six Assessment in 2021 has already warned that 2011 has already warmed that we may have moved beyond the 2° limit with only next two decades to work on adaptation and mitigation.

What narrative can make people move from agreement to action? Writing books and articles no longer matters so much because most people do not get their information through the print media, video, tweets and social media matter far more. Most people no longer have the patience nor interest to go through very complex and technical, scientific evidence. They need simple stories with clear cut options.

Greta Thunberg is very effective because she speaks the language of the young. What we need post COP26 is not more blah blah but evoking an emotional reaction from more people that climate warming is everyone's responsibility, so that they will act.

Different countries pledge to target of NetZero emissions

One of the world's largest oil producers, Saudi Arabia announced on 23rd October, it aims at reaching 'NetZero" greenhouse gas emissions by 2060, joining more than 100 countries in a global effort to try and curb manmade climate change. Saudi Green initiative Forum was timed to make a splash before the start of the global COP26 climate conference being held in Glasgow. The prince vowed Saudi Arabia will plant 450 million trees and rehabilitate huge swaths of degraded lands by 2030, reducing 200 million tons of carbon emissions and attempting to turn land locked city of Riyadh into a more sustainable capital. The kingdom joins the ranks of Russia and china on their stated NetZero target date of 2060.

The United States and the European Union have aimed for 2050

Saudi Arabia says it will reach NetZero through a so-called "Carbon Circular Economy" approach which advocates "reduce, reuse, recycle and remove". It is an unpopular strategy among climate change activists because it still unreliable carbon capture and storage technologies rather than honing in on the phasing out of fossil fuels.

The announcement provided few details on how the Kingdom will cut its emissions in the short and medium term, including when it will peak its emissions. Experts say sharp cuts are needed worldwide as soon as possible to ensure the world has a chance of capping global warming at 1.5°C as agreed in 2015 Paris COP 21.

Earlier this month United Arab Emirates announced it too would join the NetZero club of nations by 2050.

New Zealand has become the first country in the world to pass a law that will ensure financial organizations to disclose and act on climaterelated risks and opportunities, the government announced on 20 October 2021. The financial sector (climate-related disclosures and other matters) Amendment Bill has now passed its third reading. Once in effect, it is expected to make a significant contribution to New Zealand achieving carbon neutrality by 2050, reports Xinhua news agency. New Zealand is a world leader in this area and the first country in the world to introduce mandatory climate related reporting for the financial sector. "We have an opportunity to save the way for other countries to make climate-related disclosures mandatory" Shaw, the climate change Minister said.

Climate change is not just facts figures and future forecasts. Nature is itself under siege from global warming and is bleeding our earth to death. Climate change is real anthropogenic and unequivocal.

Before the Summit temperature were set to rise by 2.7°C. According to the Trackers' "Optimistic Scenario" global warming might yet be limited to 1.8°C would mean dramatic harm. Temperatures are now up by 1.1°C and the impact includes devastating storms, flood, and droughts. Prosperous nations' refusal to design a meaningful mechanism to deal with loss, damages shows that their neurotic of global solidarity is largely lip service. According to the Global Carbon Project other scientists' initiatives 23 developed nations have caused 50% of all historical carbon emissions. These nations with 12% of world population are thus responsible for half of the harm caused by global warming. Those who suffer most of the harm live in much poorer countries. The issue is urgent but noting is being done. Talk does not help people whose livelihoods were destroyed by climate impacts.

The most vulnerable countries need fossil fuel to be phased out fast, India and China in particular want to keep using those resources. At the very last minute, India even insisted on rephrasing the COP26 outcome document, which now states that coal needs to be phased down over the years rather than phased out.

Ironically smog was so bad in Delhi that a lock down of schools was announced almost exactly when India's delegation upheld the right to keep burning coat indefinitely.

Major announcements in Glasgow dealt with reducing methane emission, protecting forests and eliminating carbon emissions for example.

As for emission reduction, official national plans have only been scaled up moderately. The figure shows that 1.5°C goal of the Paris Agreement (COP21) in 2015 is not dead but comatose according to climate Action Tracker, an initiative of scientists, humankind, and track post-Glasgow to increase average global temperatures by 2.1°C over preindustrial levels if all national and global targets are met. This very big if given that most targets are not binding and so many promises were broken in the past.

In regard to climate finance, there was only marginal movement. Governments of prosperous nations admitted that they failed to provide annual \$100 billion by 2020 as they 6 had been promising for over a decade. The new pledge is to meet the target and most likely exceed it — within a few years and channel a larger sheer to adaptation.

World Inequality Report 2022 has been published in the last quarter of the year 2021. It was prepared at the World Laboratory based in Paris. The rich countries in the global north grew richer over the period from 1850 to 2020 by burning coal and fossil fuel emitting ${\rm CO_2}$ and causing climate change. During this period America and Europe together contributed 50% of global carbon emission. A recent IMF study corroborates that observation.

This study notes that only 16% of the world population in developed nations but they add to 40% of $\rm CO_2$ emissions. Poor countries of the world shelters 60% of world population but they contribute only 15% of carbon emission.

For reduction of carbon emission and achieving NetZero emissions for nations and pledging at the COP26 in Glasgow target dates vary from country to country.

India promised the year 2070. There were suggestions for reduction

- > Strong political will to switch over to clean and green technology
- ➤ Massive investment to switch over to generate green energy
- ➤ Historical emitters must compensate for what they did to environment to fulfill these pledges

US \$100 billion per year and also help technologically apart from financially.

India pledged to cut its carbon emission to NetZero by 2070 at the 2021 conference of last is COP26 in Glasgow. India ranks four in carbon emissions after China, the United States and the European Union. But India sidelined one of the major commitments at COP26, namely the Glasgow Leaders Declaration on Forest and Land use. This declaration focuses on commitments to reduce deforestation.

Mining activities result in deforestation, after the community result in deforestation, after the community ecology of native wildlife and push population to extinction or migration. This will increase the instances of human and wildlife habitat as well as impose soil, water and air pollutions. India reported about 0.38% of annual growth in forest which amounts to a 266 thousand hectare increase in forest area per year. However the COVID-19 pandemic lockdown has impacted about 0.67% of global forest according to Global Forest Watch Report during this period. India

lost about 38,500 hectare of tropical forest in 2019-2020 which is 14% of the nation total free cover. At present 24.56% of land is under forest cover. India is unlikely to reach its goal to cover up 33% ($^{1}/_{3}$ rd) land under forest cover.

India pledged to curb carbon emission to NetZero by 2070 cannot be achieved by sidelining the deforestation issue as per opinion of experts.

Each time a group of people in governmental and/or nongovernmental organization of the countries of the world travelled thousands of miles by air to distant places for deliberations in climate conference for days together. Adopt resolutions for implementation. How much seriously I don't know. There must be very strong political will and governmental determination to implement the same. The travelling of nearly thousand dignitaries from more than 194 countries under United Nations cause burning of tons of fossil fuel, generating and leading ultimately to the global warming. The summit should not be one of statements alone, but pledges must be made by country leaders to do this bit to save the world.

Acknowledgements

- i) A large number of reports published in The Statesman, Kolkata Edition
- ii) Articles, reports and views from D+C (Development and Cooperation); D+C identical twin of the German Edition E+2, Vol 48, 2001: 07-08, 09-10, 11-12
- iii) VdI nachrichten 29 October 2021, Nr 3, Seite 15, Technik & Wirtschaft.

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