

**April 10,2022.**

**Short note for Consultation meeting at Delhi office, CPI-ML (Redstar), Nawada.**

Friends, Comrades,

All of you might have noticed the recent release of the three Working Group reports of the IPCC (Intergovernmental Panel on Climate Change) sixth Assessment report cycle (AR-6), starting August 2021 for the WG-I report (The Physical Science Basis – of Climate Change), then the WG-II report (Impacts, Adaptation and Vulnerability) in February 2022, and finally the WG-3 report (Mitigation of Climate Change). After the release of the WG-I report, the UN secretary general again sounded the alarm – like many climate scientists have been doing for some time, and called this a “Code Red for Humanity”. After the release of the 3<sup>rd</sup> of the series, WG-III report, global scientific community and many others – including sensible media, have told what the IPCC has indicated – “IT’s NOW OR NEVER”. One has to remember that the IPCC is no radical group. It’s not even a free association of top scientists (though top climate scientists, economists, social scientists (for the AR-6) and other experts work for the reports). It is an inter-governmental body created by the UN, and is fairly conservative. Only those scientific conclusions pass through its final editing, on which there are high degree of certainty and which withstand very rigorous checks. The high pitched alarms and final warnings coming from such a conservative body, indicate that the Earth is very near a collapse of its life-support systems.

The critical state of many of the Earth systems that controls global climate and keeps this stable – like the Arctic sea ice, Greenland and Antarctic ice caps, global wind patterns, the worldwide thermo-haline circulation (Ocean currents), the Amazon and other large rain forests, the massive permafrost region, the Boreal forests, .....are known to be fast deteriorating for the last few decades. There are studies indicating that the world’s largest carbon sink, the Amazon rain forests, might soon be turning in to carbon emitter, with a process of forest die-back possible in few decades. The global Coral reefs, which – despite occupying only about 2% of the oceans, are home to nearly 25% of marine biodiversity, are facing extinction, with nearly 40% of coral reefs already bleached and dead, with devastating consequences for fish and other marine life. A worldwide study report published in 2019, by the intergovernmental body IPBES stated that roughly ten lakh species of life are facing extinction. Insects form a big chunk who are in the firing line, and insects are the main pollinators for most of our fruits and vegetables. The main Ocean current, the so called Gulf Stream, which plays a major role in controlling global climate, is visibly slowing down, a phenomenon never before seen by humans. The vast permafrost areas and the shallow Arctic Sea beds have started releasing vast quantities of Methane, a Green House Gas nearly 87 times more powerful (for warming the Earth) than Carbon Dioxide in the short term. This is the dreaded “MethaneBomb” scientists were afraid off being triggered. Severe cyclonic storms have increased in both numbers and strength in the Gulf of Mexico, in the eastern Pacific and in North Indian Ocean, devastating hundreds of millions of people’s lives.

The large scale climate driven disasters (or Climate extreme events) have increased sharply, with India facing big cyclones on both Bay of Bengal and Arabian Sea coast every year now – a phenomenon not seen for at least the last 80-90 years. This has put – not only the 12 million plus coastal fish-workers, but also over 200 million coastal residents (who reside within 5 Kms of the coastline) in to grave dangers of loss of lives, of property, of loss of livelihoods. Normally dry areas in central and western India have faced massive rainfalls and widespread flooding. Kerala is now facing devastating floods almost every year. Exceptional hot periods are draining the soil of moisture affecting crop yields drastically. As a result (combined with

other causes), over 29% of India's total land mass is facing desertification. Many small rivers have either dried up or in the process of drying up – affecting not only the hundreds of millions who get their drinking and irrigation water from these, but also over 11-12 million inland fishers. People from many states are facing crippling water shortages, with about 200 districts becoming water scarce. Crops are being affected badly by either untimely heat, or hail damages, or massive losses from flooding. The Urban poor / working class are badly suffering from increasing impacts of Heat waves and Heat Index (a combination of high temperature and high humidity), which is a killer impact. Continuously rising sea levels are already forcing millions of people from their homes and farms, and by all studies, these numbers will rise fast. The list goes on and is increasing.

In the face of these loud warnings of Earth-wide catastrophic changes, the governments, businesses and agenda-setting global financial institutions have only mouthed empty rhetoric to fool the people, while continuing to pursue their fossil fuel based profit pursuit. In the highly hyped Paris Climate summit in 2015 November, almost every government and attending mega businesses agreed to drastically reduce their GHG emissions at a fast pace, and to transition to no-carbon economies by 2050. Yet after the Agreement was signed in November 2015, global total Green House Gas emissions have risen every year from 2016 to 2019, reaching a high of 37.6 Giga tons of CO<sub>2</sub>, only falling 5.8% in 2020, but Not due to any directed action, but for the world-wide economic shutdown due to the COVID pandemic. And in 2021, the emissions took a sharp upward turn again ! Almost every government is pushing for increasing the production of some or the other fossil fuels – Coal for “developing” countries like China, India, Indonesia, Phillipines, Bangladesh,..... And Oil and Natural gas for the richer “developed” / highly industrialised (OECD+) economies. The big global financial institutions (IFIs, MDBs, BDBs,...) have pumped in over US dollar Five Trillion (well over 1.5 times India's entire current GDP) in to fossil fuel businesses, in just five years from 2016-2020, after announcing their great intentions to “tackle climate change” ! The G20 economies (group of countries with the world's 20 biggest economies), who account for over 80% of global emissions and nearly 90% of global trade, and also have the biggest financial and technological capacities, have actually increased their collective emissions significantly.

In 2021, the critical Glasgow climate summit was acknowledged to be the (almost) last chance for a globally agreed turn-around from massive extraction-production-growth-emissions, and towards a low emissions, zero-carbon global economy. The parallelly accepted (in September 2015) Sustainable Development Goals accepted the principles of “Leaving No One Behind”, and a zero-hunger, No-Poverty, Water & education for all, decent jobs / income for everyone, restoring Oceans and land to health, .....and it was universally accepted that without stopping the catastrophic turn to Climate Chaos, none of this can be achieved. Yet, just before coming to attend the Glasgow CoP-26 (the 26<sup>th</sup> Conference of Parties), US president Joe Biden was negotiating hard with OPEC (Organisation of Petroleum Exporting Countries) to increase their oil and gas productions, so that US drivers of big SUVs can enjoy low cost Gas (petrol) to merrily drive around to destruction of the Earth's life support systems. The Prime minister of the CoP-26 host country, Boris Johnson, was pushing hard to open a massive new oil drilling operation in Cambo. The head of government of the most populated country in the world, China (the biggest emitter / polluter by far) increased their coal based power, though taking some action to control the severe air pollution. India (third largest emitter behind China and USA, but much lower down the rank in per capita emission), is opening up multiple new large coal mines, privatised coal mining for profit and pushing ahead for new coal based power plants, despite over capacity and critical levels of air pollution all over the country, killing over 12 lakh Indians each year. The president of the largest economy of Latin America, Brazil, is merrily burning millions of acres of Amazon forests each year, to increase grazing grounds for beef exports, and open fields for soybean etc. Other large economies like Indonesia, Mexico, South Africa.....all followed in the same mould.

With this perspective, and keeping in mind the dire warnings of the IPCC, IPBES, WMO,..... reports, the urgency called for by the WG-1 report, which paints a grim picture of the physical state of the climate systems, and the WG-2 report that show an equally dangerous scenario of impacts, vulnerabilities etc, the WG-3 report on mitigation sounds another clear and loud alarm -- that global aggregate emissions of GHGs must peak by 2025 (less than a mere 4 years time) and then rapidly decline by 50% in the next 5 years, if there has to be some possibilities of avoiding 1.5°C temperature rise (from pre-industrial average) and catastrophic climate change. It's another matter that some of the IPCC forecasts have been overshoot by actual changes in the Earth Systems, and some scientific assessments show that we are now committed to crossing 1.5°C rise in the next decade. This is Not Like other localised or short term problems. Once the Earth passes a critical temperature rise – be it 2 C or 1.7 C, there is a danger that the Feedback Mechanisms will take us in to a Runaway Climate Change situation, and we will race towards a Hot-house Earth scenario, may be for centuries to come. Human civilization as we know it, will likely cease to exist, with only the elite creating highly protected safe heavens for themselves. Hundreds of millions might die and billions will suffer badly.

It's also clear that governments, businesses and industry have consistently refused to take necessary climate actions, that they used only rhetorics to deceive the people at large, and that they are pursuing a largely fossil fuel driven "COVID recovery" of the economies.

In these circumstances, it's only large scale people's uprisings that can hope to force a change of course, but that is far easier said than done. The “ordinary people” are kept in darkness about the grim situation all of us are facing. They are also faced with multiple challenges in their daily lives, of earning enough to feed their families, of escaping death and severe diseases due to non availability of basic health care, of struggles to get the basic water and energy supplies. It is a challenge that we must accept, to make these connections clear to people on the ground, to mobilize them for acting as organised collectives, for better scientific and political understanding and action.

----- Soumya Dutta -----