ACTA SCIENTIFIC AGRICULTURE (ISSN: 2581-365X)

Volume 3 Issue 11 November 2019

Letter to Editor

Comments on IPCC's 24th September 2019 Report on "The Ocean and Cryosphere in a Changing Climate: Summary for Policy Makers"

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Received: September 30, 2019; **Published:** October 11, 2019

DOI: 10.31080/ASAG.2019.03.0677

Inter-governmental Panel on Climate Change (IPCC) released on 24th September 2019, the 3rd Special Report "The Ocean and Cryosphere in changing climate: Summary for Policy Makers" [SROCC]. The 1st one refers to "Global Warming of 1.5oC" [SR1.5] and the 2nd one refer to "Climate Change and Land" [SRCCL]. I submitted my comments on the 2nd report [1]. The 2nd and the 3rd are primarily the hypothetical outcome from the 1st report only, which is clear from 'A1 – A3'.

Earth's climate is dynamic and it is always changing through the natural cycles. What we are experiencing now is part of this system only. It is beyond human control. We need to adapt to them [2-5]. The fact is: global warming is not climate change but it is only small component of climate change [6,7].

A1: Over the last decades, global warming has led to widespread shrinking of the cryosphere, with mass loss from ice sheets and glaciers (very high Confidence), reductions in snow cover (high Confidence), and thickness (very high Confidence), and increased permafrost temperature (very high Confidence).

The inferences were made using model based "HOAX" Projections that are far from reality. This is not new, IPCC in its AR4 concluded that "Himalayan Glaciers will melt by 2035" and Al Gore concluded in his Inconvenient Truth that "Greenland would become ice free in 5 years". We questioned these conclusions. R. K. Pachauri, the then Chairman of IPCC, dismissed the criticism, claim it as "voodoo science". While this is going on IPCC and Al Gore jointly received Nobel Prize. After this event, both these conclusions were withdrawn by apologizing. IPCC says that the Himalayan Glaciers won't melt by 2035 and expressed regret by saying that established standards of evidence not applied properly.

According to a 2013 IPCC report "glaciers have continued to shrink almost worldwide" [about 8 out of 10 Chance] that Northern Hemisphere spring snow continues to decrease. Reddy [7] discussed some of the results of different scientific groups. In 2014 a study of 2, 181 Himalayan glaciers from 2000-2011 showed that 86.6% of the glaciers were not receding [this was also informed to Indian Parliament by the minister of forests and environment and climate change after his return from Paris meet in December 2015]. Heavy snowfall was reported in the latter two years in Himalayan zone.

There are several local and regional causes for ice melt [7]. In Arctic and Antarctic zones in addition there are several other activities like drilling for gas and oil and Earthquakes and volcano eruptions affect the ice melting or ice destruction. Also, natural cyclic variation plays the major role on sea ice extent over Arctic and Antarctic and thus on sea level rise or fall. They presented high seasonal variations -- summer to winter -- and annual patterns around the mean. Such variations of Arctic and Antarctic present opposite patterns similar to Atlantic and Pacific oceans temperature cyclic variations [6,7]. Geological Survey of India monitoring few important glaciers in Himalayan region. Gangotri, is one of them, feed the main river Ganga. Due to formation of fault zone the ice started receding and now it started recovering. These are factual localized conditions but the present IPCC report talks of confidence limits based on poor quality model assessments based on the projected global warming.

India Meteorological Department (IMD) brought out a meteorological monograph on "State level climate change trends in India" [8]. The report used 280 met stations data and 1451 rain-gauge stations data out of 500 and 2500 stations respectively for 48 years – 1951 to 2010, which forms the so-called global warming period. Annual mean temperature trend was zero in major part of central India. Even in other parts, some showed positive (increasing) trend and some others showed negative (decreasing) trend. The basic problem here is that majority of the met stations selected for the temperature analysis are from urban areas wherein urban-heat-island effect contributes to positive side. Average number of days per station in each year reaching or exceeding 100oF in 982 stations of the USHCN data base (NOAA/NCEI, prepared by J.R. Christy) during 1895 to 2014 in US showed the highest around 1935.

The Sun emits energy, which is constant, present a natural cyclic pattern in association with the Sunspots cycle. Sun's energy reaching the ground [global solar radiation – short wave part] and balance after the Earth's emittance of absorbed radiation [net radiation – longwave part] present the Sunspot cycle [9]. They are 10.5 ± 0.5 years and its multiples. Global annual average temperature anomaly presents 60-year cycle. After separating the natural variability {varying from -0.3 to + 0.3°C} from trend {0.3°C per century or 1951 to 2100 is 0.45°C} [6,10]. Unlike model projections presented by IPCC in its report they are far less. This is with adjusted

data series. Also IPCC in its reports showed decreasing trend in climate sensitivity factor [1.95 to 1.55] which indirectly suggests that the global warming component from 1951 to 2100 is practically zero or insignificant to influence nature.

The rainfall data used present misleading results basically because it is a truncated data set of cyclic variation data series. To answer a question raised in Indian Parliament Indian scientists used one 60 year cycle data – Sine Curve of high to low – and said Indian rainfall is decreasing. If they would have shifted backward or forward by 30 years the trend would have shown increasing trend. All-India annual average rainfall presented 60-year cycle and thus Indian rainfall follows the natural variability with no significant trend [11,12]. These patterns influence temperature and thus the selected temperature period plays vital role on conclusions. Nobody bothers on this vital aspect.

In 'A2' the report talks of --- marine heat waves (frequency and intensity) ----, and in 'A3' the report talks of ---- sea level rise. Also the report says that "Increases in tropical cyclones winds and rainfall, and increases in extreme waves, combined with relative sea level ice, exacerbate extreme sea level events and coastal hazards ---.

Reddy and Rao [13] presented heat and cold wave phenomenon in India. The high pressure belt condition around Nagpur drives the western disturbances in summer and winter around Indian regions. They vary with year to year; zone to zone. Here the general circulation pattern existing at that time plays the major role.

The coastal zone on the east coast has been destroyed to meet the human greed, under the disguise of tourism, commercial establishments within the SEZ zones that were encouraged by government's environment ministry -- Today a report presented that on the orders of Supreme Court of India illegally built structures in SEZ zone were demolished in Koch zone. The major casualty is destruction of mangroves that causes coastal erosion under high tides as this zone is prone to frequent cyclonic activity. Also, aqua culture farms also affecting the coastal zone in terms of erosion and polluting the coastal waters. Today's Deccan Chronicle (Vizag Edition) of 26-9-2019 presented a report "Earth is running out of time: Intellectuals". Above the text presented a photograph "Plastic waste accumulates on the shore near Lawson's Bay in Visakhapatnam on Thursday". This is the scenario that is affecting the life in the coastal waters in terms of quantity and quality. This is creating livelihood problem to fisherman. Coastal waters have been polluted with urban sewage, industrial effluents, etc. Mangroves provide shelter to rich sea food and as well act as protective wall to stop tidal fury. Here the basic problem is human greed and not fictitious global warming.

Reddy [14] presented the historical data on Texas major hurricane landfalls and western gulf of Mexico sea surface temperature, major land falling hurricanes in Florida since 1900; sea level rise at stations along the Gulf coast, etc. Over the last 150 years, the number of major hurricanes hitting Texas has been the same when Gulf of Mexico water temperatures were below normal or when they were above normal. Land subsidence has been creating sea level rise syndrome. For example it is seen along the Gulf coast due to several human greed related actions and natural phenomenon.

Reddy [15] studied Andhra Pradesh rainfall. The annual march of southwest monsoon and northeast monsoon rainfall for the coastal Andhra met sub-division presented reverse mirror images for the two seasons, though the magnitude in mm differs. They followed 56-year cycle but in opposite direction – similar to 60-year cycle in Atlantic Ocean and Pacific Ocean temperatures --. The frequency of occurrence of cyclonic activity in Bay of Bengal followed the southwest monsoon 56 year cyclic patterns with mean as 10 [7].

The report observed that "Climate change is likely to mean monsoon systems affect larger areas over longer timescales, and rainfall during monsoon season is likely to intensify while becoming less predictable. The largest effect, which is already being observed today, is an increase in the year-to-year variability of the monsoon strength and the associated extremes of rainfall". This statement is not based on factual information but based on hypothetical imagination. Reddy [2,3] presented the natural variability in rainfall and adaptation of agriculture to these over different parts of the globe. Here the basic problem is, misusing of the word "climate change" as de-facto global warming. See for more information Reddy [3-5,11,12].

Summary

The IPCC special report on the 1.5oC goal, for example, said it was possible to keep the rise in temperature to within 1.5oC, but for that the world would need to bring down its greenhouse gas emissions to half of its 2010 levels by 2030, and to net zero by 2050. --- Some countries have already announced their intention to achieve this target, but the most prominent emitters China, US, India have so far not done so. Yet, with this scenario Indian temperature presented heterogeneous pattern, some areas showed no change, some areas showed decreasing trend and some other areas showed increasing trend. Here we must remember the fact that majority of the met stations selected were in urban areas and thus urban-heat-island effect contaminates the temperature data. The intensive irrigated agriculture growth in Punjab and Haryana impacted by cold-island effect. The central Indian regions were affected by both. Even with number three in CO2 emission scenario [after China and 2nd US] there is no uniformity in temperature trend in India – same can be seen in Southern and Northern Hemispheres. That means whether you control emissions or not temperature trends were controlled by several other localized factors. Same is the case with US and China.

The report was built on the false foundations, such as "There is already a lot of irrefutable scientific evidence to suggest that human activities have been altering climate in a way that would have disastrous consequences for the planet." Though it is true but it is not due to global warming but due to direct intervention of humans on nature. For example, if we destroy the water flow system, flood

intensities and frequencies will increase. This is a fact with urban flooding – in Mumbai, Chennai, Hyderabad, Srinagar, Uttakhand, etc. [12]. The important feature is Western Ghats: on wind-ward side heavy rains occur and on lee-ward side less rains [rain shadow zone]. But this is modified by cyclonic activity in Bay of Bengal. So, if Western Ghats are destroyed the whole rain system collapses and thus the temperature pattern.

The report says that the frequencies of extreme El Nino and La Nina events are the Pacific Ocean is likely to increase in the coming years that could possibly result in more intense wet or dry periods in India. This is erroneous conclusion [2-5,11,12] as Indian rainfall follows natural cyclic pattern but varies with region and so is the case around the Globe. During 126 years [1880-2006] : Out of the 18 El Nino years, deficit in 7 years, below normal in 5 years, normal in 5 years and 1 year excess rainfall was received. Out of 24 La Nina years, 10 years received excess rains, 7 years above normal and 7 years normal. In 84 normal years [without El Nino or La Nina], 37 years received normal rainfall, 13 years below normal, 14 years deficit, 14 years above normal and 6 years excess. In 126 years, deficit rainfall was recorded in 21 years; excess rainfall was recorded in 17 years; and normal rainfall in 49 years. The excess and deficit years followed natural cycles.

It also pointed out that the global food system, which would include activities such as agriculture, cattle-rearing, food processing industry, energy consumed in these processes, and transportation of food items, could account for as much as a third of all greenhouse gases. It said nearly 25 per cent of all food produced globally was either lost or wasted. And even the decomposition of waste food released emissions. I myself presented food-waste in India [radio talk in 2011] is around 30-40% and thus the inputs used to produce that [FAO reported this as 30% for the globe] [4]. This does not consume energy. It is due to non-availability of storage facilities, unusual weather events, etc. But, IPCC forgot the major component of energy waste – IT sector and Multinational Companies agriculture technology which in addition created air, water, land and food pollution and thus health hazards and thus pollution due to drug manufacturing industries-hospitals and the vicious circle moves on. Stan Cox's book of "Sick Planet: ---", highlighted this issue. Paris 2015 Agreement did not include these vital aspects [only temperature was included] in the Agreement document with MNCs lobbying even after Pope Francis, US President and as well UN Secretary General emphasised this aspect. Even in 60-70s environmental movement on pollution [carbon dioxide is not a pollution – we breathe air and use oxygen and release carbon dioxide] side lined with fictitious global warming with very poor quality data set at Rio Summit.

With the human greed and apathy from governments caused the destruction of coastal belts and polluted the shore lines that affected the sea life in India.

Few suggestions for consideration

Here are few suggestions to UN

- IPCC must be disbanded and the money spent for IPCC may be transferred to upliftment of downtrodden people in developing countries.
- Also, UN must think on how to bring down the population growth and how to save energy. One of this is urban planning.
- Give top priority to bring down pollution [air, water, land and food].

Here are few suggestions for India

- India should dump the "GARBAGE" reports of IPCC which are speculative that create fear psychosis among public and use this to get billions of dollars.
- It is clear from IMD monograph that there is no global warming threat to India.
- FLOODS, DROUGHTS, HEAT-WAVES and COLD-WAVES were there in the past, are there now and will be there in future. However, they vary with location to region [5,11]. The Paris agreement has no role on these.

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