



World News of Natural Sciences

WNOFNS 13 (2017) 43-51

EISSN 2543-5426

Climate change: Policy and Politics

Aastha Pudasainee, R. B. Ojha

Himalayan College of Agricultural Sciences and Technology, Kathmandu, Nepal

E-mail address: aasthapudasainee123@gmail.com

ABSTRACT

Climate change has now become an inevitable truth. Anthropogenic CO₂ emission accounts for 80% of total GHGs emission and is at the highest level (403 ppm) of CO₂ observed in human history. According to the Global climate risk assessment, Nepal contributes only 0.01% of all global CO₂ emissions and 0.025% of total GHGs emissions, but ranks 13th in the category of most vulnerable country. Nepal, being signatory of UN policies and strategies set out for global action, has begun implementing mitigation measures. Thus, Nepal's government prioritizes climate change issues in its action plan, policies and acts. It is difficult. On one hand the poor economic countries such as Nepal are struggling under changing climatic circumstance, whereas on other hand, developed countries make this a political agenda. Still, alarmists and skeptics have their own opinion. Alarmists claim that we will be burning in hell by the end of the century. Skeptics assert that fear has been misplaced. This paper, prepared with thorough review of secondary sources via Web science, Scopus and Google scholar, aims to highlight the global climatic political debate that influences the climate change deal and recommends policies for the same.

Keywords: Green house gases, Politics, Debate, Policies, CO₂, Climate change, Skeptics, Alarmists, Threat, Fear

INTRODUCTION

We are aware all about the global warming hysteria and many outrageous claims that have been made till date. It's becoming a personally relevant public interest for us. Climate change is continuously shaking the world. The subject is very topical and there is so much hustle and bustle regarding it. Climate change has truly played a magnificent role till now and this alarmism continues to reach higher levels of desperation. The subject is really prioritized

and there are scares and screaming about it all over the world. The world has been freaking out by the nightmare called climate change. Climate change is a complex and serious issue and the world is traumatized by terror to consider this emergency called climate change.

Climate change has an epic story. It was discovered before the discovery of penicillin or atom bombs. Scientists first understood that the earth's climate was not as it was before. It was during 1820s, when Fourier suggested the theory of green house effect in which the gases trap the heat of the sun like the glass of green house. Humans were not blamed for the emission of green house gases by then. About 100 years ago, Arrhenius estimated that rising of CO₂ content, increases the earth temperature due to burning of fossil fuels by humans. Just like this, many hypothesis and ideas have been put forward by researchers and scientists till now. But not a single detail is totally settled or completely certain. Scientific evidence continues to be gathered around the world, and assumptions and findings about climate change are continually analyzed and tested. Patterns of surface warming, temperature changes increase in ocean heat content and atmospheric moisture, sea level rise, and increased melting of ice also match the patterns scientists expect to see due to rising levels of CO₂. Scientists have developed various models to prove anthropogenic global warming. IPCC and computer modelers have predicted that earth is in store of catastrophic warming in this century. This issue has truly turned modern scientists into psychics and future tellers. They give their predictions based on their assumptions. But the point to be noted is that till now none of the predictions proved to be correct. For example, the predictions of extinction of polar bears and melting arctic have proved to be wrong. Polar bears are actually thriving and 2015 was the year when largest refreezing of arctic was seen. In 2008; China had its coldest winter in 100 years. Baghdad saw its first snow in all recorded history. North America had the most snow cover in 50 years.

Alarmists say that it has the capacity to destroy the earth, destroy the resources and make it unsuitable for the future generations. Moreover, climate change has also turned scientists into time travelers. Scientists have travelled 100's of years back to the past to learn about climate change. They study and research collecting the evidences and claim that some climatic disasters are definitely going to happen in the future which always causes huge panic in the public. There are claims like ocean is rising, polar ice is melting, endangered species like polar bears are decreasing in number (extinction of species), storms are increasing, weather is fluctuating, earth's temperature is rising and so on. People get Goosebumps hearing the other claims like spreading of deadly diseases, increase in hurricanes, scarcity of water, decline in agricultural productivity, disappearance of islands, droughts, famine, and habitat loss in people by so and so year due to global warming. Global warming alarmists see a future plagued by war, terrorism, economic dislocations, droughts, crop failures, mosquito borne diseases, and harsh weather all caused by manmade greenhouse gas emissions. They assert that humans will be burning in hell by the end of the century. The chaos would be far greater even than the sum total of chaos of the global wars of the 20th century. Climate change will lead us to 3rd world war. It has been predicted that the earth temperature will rise up to 4 degrees (Celsius) by 2100.

Some believe that it sounds like a weapon of mass destruction to them. We get terrified hearing all about this and feel guilty realizing that we ourselves are the culprits behind this. We get emotional and our inner spirit to save our dear mother earth arises. It is a slow poison which is killing and slowly paralyzing the world with its impacts. This topic runs 24 hrs a day

and has crept into all aspects of media, countries and school/college curriculum. Climate change has reached the aspects of female birth controls to control the population as well.

Anything and everything is blamed on climate change. Poor climate change seeks justice. Scientists, politicians and activists are working actively for environment. Many climatic summits are organized, mitigation policies are made, use of alternative energy is being encouraged, capacity of carbon sinks are tried to increase, imposing of tax on energy use and gas emissions; climatic engineering is also being approached. In 2005, an agreement called Kyoto protocol was signed which aimed to reduce the emissions of CO₂ and other green house gases. Recently in 2015, Climate conference was held in Paris, where 195 countries adopted the global climate deal. The agreement had set out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2 °C. Actions to mitigate climate change are based on the goal of achieving a particular temperature target. Climate change has turned politicians into preachers. Former US president, Barack Obama believes that climate change must be controlled as it is a big threat to USA. He wrote in his proclamation for Earth Day that, we must act before it is too late. The bishop of Rome, Pope Francis answered that if he may use a strong word he would say that we are at the limits of suicide. Secretary-General Ban Ki-moon says that climate changes could not only have serious environmental, social and economic implications, but implications for peace and security, as well.

Alarmists believe that over the past century global temperatures have risen by some 0.6 degrees Celsius (deg C) on average and all the evidence point to the primary cause. Climate change is powerful enough to have negative impacts on mental health as well and it may induce climatic depression ultimately leading to suicide. That is why; leadership for climate solutions is growing dramatically. Major faith communities, heralded by Pope Francis; leading health organizations, companies including Google; colleges and universities; and big states and cities across the world are taking action and speaking out for climate solutions. Whenever there are special days like Environment day, climate change is always a popular topic. Scientist Aaron Wildavsky calls global warming alarmism the “mother of all environmental scares.” Politicians and bureaucrats assert that global warming is a greater threat than ISIS.

There are both believers and skeptics of climate change. It is a hot political, ideological and social debate of this day and age. The propaganda has been running since 30 years. Actually there is lack of clear public understanding about climate change which may have lead to confusions. Non believers like US president Donald trump (real estate developer) have derided the science of climate change. He calls it to be a hoax created by the Chinese in order to make US manufacturing non competitive. Trump doesn't believe in climate change and he asserts that the changes we see are actually just weather, unaffected by human actions. He puts climate change low on the list of problems we need to address. Recently Trump withdrew the US from Paris Global Climate agreement. And under Vladimir Putin's rule, Russia has been skeptical towards attempts to tackle climate change. He believes that Climate change is a fraud to restrain the industrial development of several countries including Russia. Many cynics including him feel that climate change is happening but it is not anthropogenic. They have different views than Al Gore. We all know that Gore had alerted the public to an increasing planetary emergency due to global warming in his movie “An inconvenient Truth”.

Even movie industry has thrived due to climate change by the release of other movies like ‘The day after tomorrow’ etc.

Al Gore still promises a rain of fire and brimstone on us, unless we change our ways. Skeptics say that global warming is one of the greatest lies and children are brainwashed with it from preschool. According to the skeptics, alarmists are scaring the country into enacting their ultimate goal, making energy suppression which means higher prices for food, electricity, medical care, massive job and business losses, and drastic reduction in GDP. They also say that UN is using debunked climate change science to impose authoritarian rule. Now we understand that climate change is being used as a tool to gain power over nations and to gain superiority and control by politicians through dirty politics. Deniers feel that politicians exaggerate the issues of global warming to get attention and fame including the scientists. Many scientists and PR firms are paid large sums to make the case both for and against Anthropogenic Global Warming (AGW). They believe that it is a conspiracy all about how climate scientists and politicians are distorting or hijacking the science to suit their own purposes. According to IPCC, 95% of scientists agree on manmade climate change. But according to others, 98% of scientists totally disagree on it. It has been believed that they say so to make their point believable and weighty. Fear is the best motivator to convince people to give up their resources and freedom. So, our weakness i.e. fear has been utilized in a wrong way.

In the 1970s, the trendy climate change fear was global cooling. Notably it didn't happen. The media and government spin-doctors were all over the idea in the same fashion as they are now. As we can see, it hasn't happened - and in fact the opposite idea is now prevalent. They believed that increase in CO₂ content actually cools the earth temperature. So they publicized the fact that we are not heading towards global warming but towards global cooling. There is still a hot debate about global warming vs. global cooling. Temperature had decreased from 1940 until the late 1970s after industrial revolution when huge amount of CO₂ gas was released in the atmosphere. So, the fear of ice age had aroused amongst scientists due to rise in CO₂ content in the coming years. But skeptics say that rise and fall in temperature is normal. It is a part of nature's cycle. Now the temperature is rising and later it will fall. It was just a coincidence that caused the temperature to fall after industrial revolution. These events had no relation with each other. The rise and fall of earth's temperature has been happening cyclically and whatever predictions have been made are all perpetuated by fear and imagination. Some predict that ice age awaits us in the future and there will be mini ice age from 2030-2040 believing that temperature cools after certain periods of warming. But some believe that CO₂ and green house gases content is so high in the atmosphere that this might actually not occur due to the green house effect. Some say that even without man-made global warming, climate change would have been inevitable as our atmosphere is delicately balanced. The world climate has historically gone through a cyclic pattern of climate shifts and ice ages. It is a great relief that climate change is happening in this current age, when we are ready with technology. Surviving thru the ice age and preserving the human race is something our ancestors have proved is possible, but if it had happened just two hundred years ago, we would have lost all the marvels of human civilization and survived only with the bare necessities. But now the scenario is different. We have the technology to protect us, and free us from our dependency on nature. Some seem optimistic in their views.

Some believe that all heat exchanges are by radiation. Everything in the climate combines all methods of heat exchange, predominantly conduction, convection and latent heat change. The rise in CO₂ have caused oceans to trap heat as they act as reservoirs. Alarmists say that the earth has not been able to warm up to the extent that they've claimed due to the

trapping of heat by the oceans. Others argue that oceans play the major role in regulating earth's climate instead of CO₂ and after its capacity to store CO₂ ends, it will act like a bomb and create disasters. While skeptics doubt the accuracy of how the measurement of ocean temperature is done and believe it to be a mysterious black box with unlimited sink capacity to trap CO₂. There is a great fear of rising of sea level due to trapping of CO₂ leading to ocean acidification. Some discard this saying that the sea level has been tens of meters higher during past warm periods, enough to submerge most major cities around the world. Some say that CO₂ gas actually flourishes life and civilization on earth and it is not a pollutant or a poison. Actual CO₂ effect is very small. Balloons and even the climate models exaggerate the warmth that ought to have occurred from a buildup in CO₂. They believe that CO₂ which is 0.03% of total gases cannot actually be the cause of climate change and same case is with green house gases. They may have certain effect but do not play the prime role. The claims made by IPCC have no evidences too. And it has been claimed that scientists who had signed the Paris agreement were not actual scientists. Many agree that IPCC's predictions are baseless, in part because climate models are highly imperfect instruments. One researcher estimated that at least 92% of global warming data on surface temperature is based on estimates, not measurements. When a report from the government or a newspaper comes out about climate change; there are usually scientific errors throughout the arguments.

There is a lot of hypothesis and the public should be made aware all about the fallacy of the hypothesis. They say that the models are running too hot and are actually overestimating the so called climate sensitivity. They are just exercises in imagination perpetuated by fear. According to others, ozone layer depletion is not due to CFCs emitted by humans. Some believe winds actually deplete ozone layer. Till now, skin cancer rates have not increased at all. There has been a big fear of cataracts and cancers due to UV rays reaching the earth surface by ozone layer depletion. Skeptics believe that the real science is more than just a good story and it requires rigorous logic and evidence. They say that global warming is a lie and an invention of hundreds of scientists around the world who have conspired to mislead governments, and the general public. They claim that scientists aren't themselves sure. They believe that the scientists saw this theory as a ticket for scientific careers, as a way to increase their funding and to get fame. In this quest, they lost their sense for scientific objectivity. Then, they massaged temperature data, to further their cause.

They also adopted assumptions of fudge relationships and turned them into scientific proven facts. Non-believers believe it to be a dangerous plot and a secret scheme by powerful individuals or organizations. All of this is false science in order to extort money from the rich people, impose communism in developed nations, shutdown business and eventually control the people. Skeptics believe that the most publicized documents of the UN reports are not written by scientists at all. And, in a historical perspective this issue will turn out to be "The mother of all scientific frauds."

Some believe that actually solar influences and water vapor is the driver of global temperature. They observed that the temperature graph with respect to sun matches the rise and fall in temperature unlike with that of CO₂. According to critical thinkers, Glaciers have always grown and receded. So, we cannot trust unproven models. The medieval age and Holocene climatic optimum was warmer as today and that was not anthropogenic warming. But others say that medieval age was a regional effect where warming was only on a particular region and the overall climate was cool. Again there is a debate in this regard saying that regional effect can have a global significance too. It is believed that humans have

no fingerprint on climate change. The problem is that there is no climate change. There is no global warming. Though the poorest countries contribute the least to the phenomenon, they get seriously affected by it. They say, climate change is a strategy by developed nations to pressurize the developing countries to develop without use of fossil fuel sources of energy. There is something inherently unfair in such pressure that could hamper growth of developing country economies especially when rather little is being done by developed countries to reduce their own fossil fuel emissions. Nepal is ranked 13th in the world in terms of climate change vulnerability (Source: 2012 Climate Change Risk Atlas). So many attempts to curb climate change in Nepal have been going on by many sectors. In case of Nepal societal aspects of climate change impact have been studied more than the meteorological records.. The talks about changing weather, droughts, freezing colds in winters, agricultural issues regarding climate change have been a major issue. But as claimed by many logical thinkers, climate change is a natural process and it is not anthropogenic, and they believe that same thing applies in Nepal too.

Other group of people believes the theory of water vapor and aerosols. A lot of aerosol gas was released during the industrial revolution. Aerosol reflects the heat back into space and has cooling effect on earth. That is why; mini ice age was experienced after 1940s. CO₂ and other green house gases have warming effect while aerosols have cooling effect. After the banning of aerosols after 1970s temperatures had gone up. Some believe that a similar phenomenon is happening right now where increased CO₂ is warming the earth and aerosol is cooling the earth. There is influential amount of aerosol in the atmosphere. So, a balance is being created by the two. They agree that aerosol despite of having cooling effect is not a beneficial gas. But other skeptics don't believe in aerosols and CO₂ effect believing that they can't be the prime cause for the same.

Skeptics want this most expensive hoax to die soon and they believe that the whole theory of climate change and global warming is an illusion. A very funny thing is that it has been believed that the release of methane gas by cows causes global warming. Many laugh at it questioning about what might have happened in the era of giant dinosaurs when dinosaurs' population was so high. And some people who believe in socialism believe that climate change is a moral issue which brings people together. According to rational economists, we are actually terrifying, wasting our time, efforts and funds over something that doesn't exist at all. According to philosophers, this universe is so huge and unimaginable. Our small perception cannot conclude that CO₂ is causing fluctuations in climate. Other planets like mars are warming too. Skeptics are against man made global warming. They believe that protocols like Kyoto protocols and Paris agreement are a big effort for almost nothing. Scientists don't realize that this earth has been here since millennium. They can't conclude their theories based on the study of just 100 years. The temperature records and graphs have shown that the temperature naturally rises and falls cyclically. Many endangered species like dinosaurs have extinct without anthropogenic causes. There is extinction and origin of new species naturally. The earth temperatures have been changing for billions of years. Earth naturally heals itself and climate is the matter of geologic time. These changes are beyond what we can imagine. Many things are yet to be known and discovered. It is just beyond our perception.

Some believe that there are astrophysical effects on climate and the planets like Jupiter have major influence over this issue. Another hypothesis that has caused major changes in the Earth's climate in the past are shifts in the Earth's orbit and Deep Ocean currents. IPCCs

hockey stick graph which shows abrupt rise in temperature was also criticized because of its analytical errors. It shows straight line for a thousand of years without any fluctuations. As, there have been cool periods as well in the 20th century, it was discredited. There have been criticisms to how the media has covered climate change to date. The media has been blamed to inform mythologies of global warming instead of facts. The way scientists, politicians and NGOs frame climate change affects how audiences respond. Media plays a great role in the exaggeration of the issue and it also serves to misinform and confuse the public. The ‘polar bear’ frame appeals to the animal lovers, while the ‘money’ frame will chime with politicians and the private sector. Politically, it is being used to introduce whole new strata of taxation, regulation and control in the name of ‘saving the planet’ – and it is believed to be a gigantic fraud. They make people believe that taxation will save our planet. Whole thing has become a business.

The final conclusions are politically driven. Some empirical evidence suggests that climate change conspiracy theories may be harmful, steering people away from environmentally friendly initiatives. That therefore presents a significant challenge for governments and environmental organizations that are attempting to convince people to take action against global warming. Global warming or climate change has become big business for high finance, employing thousands of people in business ventures, political and economical think tank groups and in lobbying institutes. Global warming fears have now caused the US to spend over 79 billion dollars of public taxpayers’ money on climate change research and policies since 1989. The global climate change industry is worth an annual \$15 trillion. The November 2015 report of the San Francisco-based Climate Policy Initiative shows that \$395 billion was spent in 2014 on climate finance. The ones who benefit from this amount are the carbon traders, dodgy academics, the environmental NGOs, consultancies and many more. Actually, most of the world industry is running by climate change. They say that even global warming skeptics are funded by oil companies. Climate change is the cause of conflicts and fight among nations leading to lack of peace, harmony and cooperation. There is just too much corruption, politics and schemes. World has really moved from the cold war to the “warming war”.

Climate change is a new religion. Some opportunists plot to take advantage from it; some genuinely try to do something to curb it while others believe it to be a hoax. It has been concluded that the alarmists are like disciples of the religion called climate change. Climate change disciples use the “language” of religion, regardless of scientific facts, to push their doctrine. They call the skeptics by the name “deniers” and that “Denier is not the language of science.” Some believe that it is the law of karma and we get back what we have given to mother earth. And whatever is happening is due to our own misdeeds. The Spiritual ones believe that the problem is that men do not create the weather or change the climate. God does. He determines how far the seas go and how hard the winds blow. They think man made climate change is nothing more than a ruse.

The alarmists assert that the skeptics are influenced by the role of internet and mind manipulation. Alarmists have been successful in making climate change issue serious in fields of agriculture, health, livestock, water resources etc. The people belonging to these fields are working actively to curb the effects of climate change in their fields with a great concern. They assert that climate change cannot happen naturally. Something has to force it to happen. But skeptics argue by asking what caused dinosaurs to extinct and what forced the medieval warm period to occur? Climate change is very interesting issue. If the hypotheses related to

climate change happen to prove to be true, the world is at a great risk. If climate change problems are solved, all the organizations, groups, businesses, etc. will definitely get doomed. If it is an illusion, all the funds, time, efforts, endeavors cultivated to mitigate it will prove to be of total waste. That, Cure will prove to be worse than the disease. If it is just a scam, then is the world shaking by something that doesn't exist at all? All aspects are dangerous and it might prove to be a greatest joke of all time. Now the question arises about whether we should act on climate change or not. Alarmists say that it is a high time to act on this issue. Skeptics believe that acting on this issue leads us to the path of self destruction and they just don't care at all. Few believe that we must care about our planet and do as much as we can for it despite of being a skeptic by going environmentally friendly. People are busy debating about their theories being correct instead of actually trying to help nature. Some believe that major life style changes are necessary while others don't.

GoN has accomplished various CC initiatives including, National Adaptation Program of Action (NAPA) and Local Adaptation Plan of Action (CC Policy-2011). Major highlights of CC Policy 2011 were to develop Climate friendly hydropower and irrigation projects, ensure Integrated approach, Ensure the participation of poor people, marginalized communities, women, children and youth, Reach various geographical areas and development sectors by 2013 etc. Climate Change Policy approved in March 2011 is a weak polished document. It has talked about everything but materialized very few. There was a clear disconnection between science and policy. There was lack of integrated strategy and coordinated policy from ministry to local level and no reviewing of laws and regulations. A "major communication gap" between national and local-level government agencies is seen. There is no sticking to the plan. There are a lot of Inconsistencies in the data and methods.

Nepal must develop its capability according to its own specificities strengthening local level government. It must negotiate hard with the richer countries and donor agencies for financial compensations. Nepal must focus on amending the existing climate change policy as it is jack of all but master of none. It should be made bit to the point and also believable. Promotion of agricultural practices to reduce carbon and GHGs emission and Carbon sequestration is a must. Clear cut policies, plans and actions must be built and undertaken.

CONCLUSIONS

As a conclusion we must say that climate change is powerful and has huge potentials to influence this world in various dimensions. Climate change issue has been ruling the world. It is an era of climate change. Everyone has the right to freedom of thought, conscience and religion. Climate change has turned into Hot debate and politics. Climate Change has nothing to do with science but is actually the new and fashionable liberal godless religion. In one hand the poor economic countries struggle hard under this changing climatic circumstance and on other hand, developed countries make this as political agendas. Hence, global political consensus is necessary to build clear cut policies, plans and actions.

Acknowledgement

This research was supported by my respected Teachers and college HICAST. I thank my colleagues who provided insight and expertise that greatly assisted the research. I would like to thank the organizers of MoChWo

conference for allowing me to present on this topic (International conference of Mountains in the changing world) held in Kathmandu Nepal. (Oct 2-3- 2016)

References

- [1] Bernauer, T. Climate Change Politics, *Annual Review of Political Science*, 16 (2016) 421-428
- [2] Andonova, L. B., The climate regime and domestic politics: the case of Russia, *Cambridge Review of International Affairs* 21(4) (2008) 483-504
- [3] Tacoli, C. Crisis or adaptation? Migration and climate change in a context of high mobility, *Environment and Urbanization* 21 (2) (2009) 513-525
- [4] Curry, J. A., and Webster, P. J. Climate Science and the Uncertainty Monster. *Bulletin of the American Meteorological Society* 92 (12) (2011) 1667-1682
- [5] Gian-Reto Walther, Eric Post, Peter Convey, Annette Menzel, Camille Parmesan, Trevor J. C. Beebee, Jean-Marc Fromentin, Ove Hoegh-Guldberg & Franz Bairlein. Ecological responses to recent climate change. *Nature* 416, 389-395 (28 March 2002) | doi:10.1038/416389a
- [6] Camille Parmesan & Gary Yohe. A globally coherent fingerprint of climate change impacts across natural systems. *Nature* 421, 37-42 (2 January 2003) | doi:10.1038/nature01286
- [7] Maria Sakellari, Cinematic climate change, a promising perspective on climate change communication, *Public Understanding of Science*, 2015, 24, 7, 827
- [8] Eric A. Davidson and Ivan A. Janssens. Temperature sensitivity of soil carbon decomposition and feedbacks to climate change. *Nature* 440, 165-173 (9 March 2006) | doi:10.1038/nature04514
- [9] Carey, P.D. (1996) DISPERSE: a cellular automaton for predicting the distribution of species in a changed climate. *Global Ecology and Biogeography Letter*, 5, 217–226.
- [10] Clark, J.S., Fastie, C., Hurtt, G., Jackson, S.T., Johnson, C., King, G.A., Lewis, M., Lynch, J., Pacala, S., Prentice, I.C., Schupp, E.W., Webb, T. III & Wyckoff, P. (1998) Reid's paradox of rapid plant migration: dispersal theory and interpretation of paleoecological records. *Bioscience*, 48, 13–24

(Received 07 August 2017; accepted 25 August 2017)