A Clarion Call on Climate Change Crisis for Conservation & Community Care

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ABSTRACT: The document, titled "A clarion call on climate change crisis for conservation & Community care provides an extensive examination of global climate crisis and its impacts on environment, economy and the human health. It highlights the increasing severity of degradation, and pollution, while emphasizing urgent need for community -driven conservation efforts and sustainable practices.

It explores as the Climate adaptation, Intersection of urbanization, climate adaptation, and heat island effect, exacerbating climate stressors. It outlines how small and S Large-scale interventions, like reforest ion and renewable Energy can mitigate these impacts touches on broader global environment concerned such as plastic pollution soil degradation air pollution and greenhouse gas emission traditional wisdom particularly from environment relationship with nature.

By adopting similar lifestyles and respectful use of resources humanity can address the climate crisis while fostering will being.

In conclusion it advocated for the unified global effort to combat environmental destruction through collective conscious action.

Homo sapiens appeared on Earth around 130,000-200,000 years ago, whereas our planet is around 4.5 billion years old. This means we have been here for about 0.000028% of the Earth's existence. Yet, in this remarkably short period we have contributed to global warming that has heated the oceans by the equivalent of dropping one atomic bomb into the ocean every second for the past 150 years, say experts. Our very existence depends on Nature.

INTRODUCTION

How long will nature tolerate our transgression? Reversing climate change is not an act of altruism towards the planet. It's our only option for survival. You may have heard this example before, about a frog in a bowl of warm water. The frog enjoys the warmth but does not realize the water is getting warmer. Eventually The water gets hot enough and kills the frog. But that's not entirely true. In real life when the water becomes hot, the frog realizes the danger and jumps out of the bowl. We, though, may not have the time to jump and we have nowhere to jump. We all know that the earth on which we tread is the basis of our lives. Out disregard of the environment threatens not just human wellbeing but human survival.



In the 1950s, Ella Fitzgerald sang summertime', the jazz classic celebrating how, in the season of golden languor. 'The living is easy'. Those summers, of shimmering warmth rat slow-ripened joys, are now a memo with epochal greenhouse gas emissions — the IPCC finds atmospheric CO2 concentrations higher than in the prior two million years — temperatures have exceeded the last 6,500 years. Gentler summers have been replaced by intense heat waves. In 1936, North America recorded a 38°C heat wave. In 2003,

Europe experienced 47°C. In 2016, India witnessed 51.0°C and in 2021, Canada experienced 49.6°C. In 2022, Antarctica is 40°C hotter than usual.

The impacts of such heat are devastating for health, assets and stability. The UNEP notes humans face 220 million more heat wave exposures now than in 1986. While climatologically disasters — heat waves bring drought and disease too — have increased fivefold since 1950, the population affected has grown by 40%, impacting the elderly, children and lower-income groups most. The ILO finds at 34°C, workers can lose upto 50% of their work capacity. Currently, \$41 trillion in GDP is at risk from heat stress globally. By 2030, heat productivity loss could equal 80 million full-time jobs and \$2,400 billion, impacting tropical countries like India most. At 1.5°C of global warming, scientists warn 'twice in a century' heat waves could occur every six years.

However, timely mitigations are possible. As Times Evokes global experts emphasize, nature offers us refuge from the damages wreaked upon her. Green spaces are a panacea, the UN noting that investing \$100 million in street trees globally can bring 77 million people a 1°C reduction. Waterways help—restoring Seoul's Cheonggyecheon stream lowered temperature by 5.9°C.

The intersection of climate change, cities and adaptation to climate stressors. I use spatial analyses techniques, systematic scientific approaches and community engagement to understand climate stressors and adaptations in cities.

URBAN HEAT ISLAND EFFECT

One of the phenomena I research is the urban heat island effect, first documented in the 1850s. This measures the differentiation between a city in temperature and humidity compared to adjacent areas which don't have built environments or roads, buildings, etc. That difference is the 'urban heat island' effect. We've learnt of factors since that contribute to this phenomenon— these include materials used to build cities like asphalt, concrete, bricks and. other supplies which are very dense in their composition. Often, the darker colors we paint these in also absorb and retain short wave radiation from the sun.

This contrasts with green spaces that absorb such radiation but dissipate it relatively quickly. Trees and plants also transpire water which cools the environment further. Hard materials hold onto heat and amplify temperatures —this is a primary contributor to urban heat. Other factors include the configuration of buildings —with big buildings amassed along a waterway, like in Mumbai and other coastal cities, the, wind coming off the waterway can get blocked. When buildings are placed, close together as well, they reduce the convective movement of air which makes it stagnate and heat.

HOTTEST YEARS

We have also found temperature anomalies within a city – these are termed hot spots where the relative difference between neighborhoods or streets can vary upward of twelve degrees Celsius. That suggests physical factors amplify heat even between streets. As it gets hotter —last year, India saw more days above 40 degrees than any prior year —that difference also increases. On a 40-degree Celsius day, a Teri-degree difference between two neighborhoods can become 20 degrees. This is hugely concerning.



Our studies show hotter areas tend to have more builtup infrastructure. This doesn't mean only tall buildings — relatively lower but large, low-slung buildings, one to two stories tall, made of bricks or cinder blocks, surrounded by concrete or built up parking lots; let the sun's radiation hit surfaces, holding that heat for a long time. Planners should ensure such areas have place to plant trees which significantly reduce the temperature.

"Globally also, the hottest years have been among the last two decades. Climate change is impacting severe weather intensity and during, even in India-be it in terms of heat waves, cyclone intensity or even heavy rainfall."Dry spells had become longer in some instances, extreme rain amounts have got bigger and hot spells have become hotter.

From a planning approach, we must increase green spaces. India has a rich history of cooling trees in cities. I grew up in Bangalore amidst sprawling banyans and lush mango groves - this has changed over the last two decades with vast urban deforestation. We need to reverse this trend, creating city a forestation. If we start planting today, by the time the even hotter 2030s arrive, those trees will provide lifesavings hade.

When the heat done phenomenon descends on us, railway tracks buckle, electricity lines melt and roadways crack. The scale at which these high temperatures are impacting urban environments in unprecedented. It makes planning for adaptations and mitigations urgent.

While renewable energy generation must increase, smaller mitigations, like air vents below roofs, painting surfaces albino or pale shades and heat-sensitive window placements, make a difference. As the world warms, governments should orient health services to heat warnings and treatments — alongside, communities should actively protect the most vulnerable. Our world is experiencing its hottest years ever.

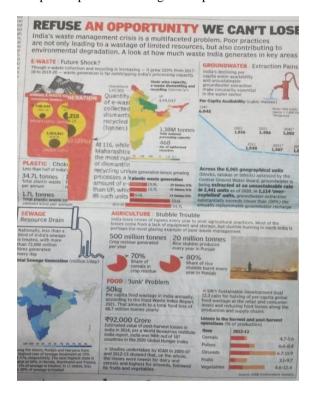
The combination of responsible efficiency and technology can help. There is growing discussion in the US about alternatives to highly energy intensive air conditioning. In dryer environments, evaporative or desert coolers can provide relief but that won't work in humid areas. There is a big move towards two-way heat pumps that allow for climate control in a more efficient manner. None of this is energy free though — so, adaptation also needs to priorities efficiency and green energy production.

Heat pumps are now considered climate friendly adaptations a heat pump can warm or cool in interior

by transferring heat in or out of buildings. The roots of cooling devices also lie in a traditional Indian practice of using mats of wet vetiver or khus grass which cool air by evaporation.

BEAT PLASTIC POLLUTION

A global call given by PM Narendra Modi in 2018 for eliminating single-use plastics has provided momentum for action, culminating in the historic resolution and its adoption to end plastic pollution. 'beat plastic pollution' India, during the fifth session of the United Nations Environment Assembly (UNEA) on Wednesday agreed to forge an international "legally binding agreement" by 2024 to end plastic pollution through multiple actions.



SOIL POLLUTION- CRITICAL UNDER GROUND WATER LEVEL

The United Nations formed to prevent soil from becoming sand, has predicted that if its quality continues to deteriorate rapidity, its destruction may be a reality soon. In addition, FAO estimates that in the next 60 years, all of the world's soil could be destroyed. By 2045, soil damage can lead to worldwide crisis, including food and water shortage, droughts and famines, triggering large-scale migration of people and destruction animal and bird species. 'Soil enables us to live, eat and breathe. Yet, today two-thirds of Earth's soil faces desertification – by 2050, one billion people could be soil refugees.

But sustainable land management, from reforestation to regenerative agriculture, can still save "Earth".

AIR POLLUTION

A 12-foot-high grey ball-a symbolic warning to curb air pollution so that our blue planet doesn't turn greywas stationed at Rumi Darwaza. The Grey Ball is mainly an artful effort to draw the attention of the public and the government to wards rising air pollution in the city.

The aim is to demand time-bound compliance of the National Clean Air Programme. Carrying on heedlessly could end the great story that started billions of years ago-but our choices could also ensure a happy continuum. These choices, from renewable energy to rewinding, sustainable agriculture to rainwater harvesting, a forestation to biodegradable packaging, habitat conservation to responsible consumption and much more. Millions around the world are making these choices now-the tremendous endeavor to stop our beautiful planet from turning into an entity we cannot recognize is the greatest story on Earth.

UP will be the first state in the country to adopt 'air shed management' for clean air with the help of world Bank and other national and international institutes. The state has set a target of reduction PM2.5 level in the air to 45 micrograms per cubic meter in five years. The air shed approach may help achieve the target. To begin with, just like a watershed which is an area drained by a river and its tributaries, there is also an air shed which is an area from where a state draws its air mass. UP's larger air shed is the entire Indo Gangetic plain. Stubble burning in Punjab and Haryana during winter affects the quality of air because of the air shed. There are two types of air sheds, the micro air shed that exists in the vicinity of the place and the macro air shed, that exists over a larger area. To minimize air pollution due to traffic, green belts will be developed and trees will be planted along roads and crossings. Garbage dumps in the city will be cleaned up in a phased manner and bioremediation of drains and null ahs before the onset of the monsoon season have been ordered. Digital hoardings will be put up at busy stretches to propagate awareness on the schemes being run by the state government. Renovation of crossings could be done through public-privatepartnership (PPP) model.

GREENHOUSE GAS EMISSIONS (GGE)

Since the Industrial Revolution of the 1800s. humanity's use of fossil fuels has raised atmospheric concentrations of carbon dioxide by over 49%. This rise, driven by ceaseless manufacture, electricity usage, chemical agriculture, transport, buildings and wastage, is higher than the natural rate of atmospheric carbon accumulation over the last 20,000 years. The UN Environment Program (UNEP) finds in 2020, humanity caused the highest CO2 concentration on record. These greenhouse gas emissions (GGE) trap heat around our planet, not letting Earth cool naturally as it has done over millions of years. The heat then impacts nature's rhythmic balance wintry and warm, rain and sun, glacier and ocean, seed and crop. these changes are not only chemical or geological-in the form of climate change, they are now impacting all species, including humans and other animals, the latter already hunted by anthropogenic impacts. It has been a flowed Cartesian dualism to imagine that we humans are superior to other animals. As the times always show such hubris never holds. What does hold life together is the web nature wove, with millions of species playing their parting enabling this beautiful ethereal, mysterious journey we each call 'life'. To Nature, With Love' have helped restore biodiversity - and humanity. For we are damaged as we damage nature. And we are restored as we rejuvenate our sibling beings. Earth is the story of all our lives.

ENVIRONMENT, SOCIAL & GOVERNANCE (ESG) FRAME WORK

Organizations have responded with enhanced disclosures and initiatives to demonstrate adherence to principles as articulated in the environmental, social, and governance (ESG) framework as part of their commitment to sustainability. comprehensive sustainability framework helps organizations think through their priorities & ESG goals and, thereby, focus on Value-creation for people, planet and society. By integrating ESG as part of their overall business strategy, companies are able to build sustainable products & services, reduce costs, and positively impact their profits while taking care of people and the planet. At the same time investors are increasingly assessing and analyzing ESG standards to screen potential investments, which has given an impetus to companies to put in place focused initiatives to measure, track and demonstrate superior performance on ESG parameters.

WHO, GCTM (Global Centre for traditional medicines) AYUSH

This year WHO will focus global attention on the interconnectedness between our planet & our wealth? The establishment of the WHO, GCTM (Global Centre for traditional medicines) is a landmark step that cements the importance of traditional systems of medicine throughout the world. This move also strengthens India's position as a global leader is the traditional medicine sector.\

The pandemic has amplified the need for urgent action on climate change and addressing sustainability concerns. While the implications of global warming and reduction in carbon footprint have been part of the collective discourse for many years, it has received enormous attention in the corporate sector in the post-pandemic world. This has come along with a clarion call for strengthening and enhancing the standards of corporate governance, as well as customer and employee centric practices and initiatives.

Public health is not limited to medical issues; instead, it is a wide field which encompasses safeguarding the overall well-being of communities. As physical and mental well-being through SPARC (stabilization, psycho-education, addressing adjustment issues, coping skills enhancement and recovery).

Our government is planning to spread awareness, provide treatment & upgrade facilities for the people to combat communicable diseases effectively. Staff deployment should be accompanied by a campaign for better health of the people in the state. Under this campaign, health workers will go door - to -door to identify patients with viral fever, vector-borne diseases, & other symptoms. Patients should not face any kind of hassles at government health setups across all districts. No patients should return from the hospital without treatment, & there has to be full OPD arrangements. Ensure inter-departmental coordination to make the campaign successful & make foolproof arrangements, including state-wide surveillance campaigns, spraying of anti-larva chemicals under mass-scale sanitation, fogging, & cleanliness drives, to ensure the safety of people.

CONCLUSION

In the last two years, humanity has begun to realize that the need of the hour is a conscious planet. The pandemic has established that the virus spares no one. It subscribes to no distinction of caste, color, race, creed or nationality. The ecological crisis has also established that the planet is everyone's responsibility. The Earth is no longer the concern of the rich and the elite. It is every individual's concern every individuals inheritance every individual's birthright. We are whether we like it or not, one planet. If we are compulsive we will pay a huge price.



It is time to act collectively. Laying aside differences of belief, culture, creed and worldview. Our only hope of survival lies in action not as believers or ideologues, but as conscious human beings. This is no longer a utopian dream. From religion to responsibility – that is the direction humanity needs to take. It is an urgent necessity. A conscious planet – its time has come. Let us make it happen.

INDIC CLIMATE ETHICS

Energy Poverty' is a stark reality for around 1.3 billion people globally. And the age old Indic climate ethics can provide solutions and practices to mitigate my climate issues we face today.

India traditions consider nature as powerful and divine, seen in practices such as revering the rivers, mountains, trees, animals, and the earth. Although the famous Chipko (tree-hugging) Movement led by women is one of the widely known examples of exemplary Indian environmental leadership in recent times, numerous other environmental practices being followed for generations can help shape energy ethics for the planet even today.

Diverse Indic notions on energy conservation suggest that:

- The five elements space, air, fire, water and earth are interconnected and provide us with renewable energy sources that can continue to support the web of life on earth. Hence, we must practise our dharma in harmony with the earth to protect and conserve energy resources rather than destroy or misuse them. Each local and national community can advocate for an end to exploiting the earth through polluting extractive process.
- Simple living is a powerful enabler for developing sustainable economies, and energy must be consumed sustainably and responsibly by and for humankind. Our treatment of nature and usage of energy directly affect our karma. We can choose to protect energy resources in the future, replacing destructive karmic patterns with good ones. Gandhi Ji is an inspirational model for simple living. His entire life can be seen as an ecological treatise his every minute act, emotion, and thought were aligned with the Indic values of truth, non-violence, and simplicity.



• Belief in the cycle of rebirth, wherein every being travels through millions of cycles of birth and rebirth in different forms, depending on their karma from previous lives, makes people respect every form of life on this planet. A person may reincarnate and traverse through many lives before achieving liberation Reincarnation creates a sense of solidarity between humans and all living beings.

• For example, several rural communities such as the Bishnois, Bhils, and Swadhyayis have maintained strong practices to conserve their local ecosystems, such as water bodies, flora and fauna as part of their daily lives. When Bishnois are protecting animals and trees, the Swadhyayis are building Vrikshamandirs (tree temples) and Nirmal Nirs (water harvesting sites) and the Bhils are practising their rituals in sacred groves, they are simply expressing their reverence for nature according to Indic teachings and not "restoring the environment". They and several other communities do not view religion, ecology and ethics as separate but as an integral part of their dharma to treat nature with respect.

The one important environmental message Indic traditions can share with the rest of the world is that human beings must be grateful and protective towards energy resources as we stand to benefit from their proper usage. Ancient beliefs and traditions area strong indicator of Indic climate ethics and are closely linked to the well-being of the people and environment on this planet. It is time the rest of the world embraces these practices.

THOUGHT POLLUTION

The problems of the environment underscore a much deeper problem that of thought pollution. When conflicting thoughts and emotions muddle our thinking, our minds become imbalanced, and confusion sets in. An unbalanced mind finds it hard to make wise decisions. For example, a doctor without balance may misdiagnose; an industrialist without balance may put short term profit over the highest good. When out inner climate is polluted, we destroy the source that nourishes us.

Yoga offers us some solutions to fixing thought pollution. Through yoga, we develop attitudes that ennoble us an benefit those around us, especially the planet. The beginning step of yoga is yam. The practice of yam blesses us with four key attitudes. These are honesty, truthfulness moderation, and non-possessiveness.

A company with honest and truthful leadership will not take shortcuts like fudging environmental tests or cutting corners with effluent treatment. The purity inside will not allow the hypocrisy of saying something and doing something else.

Moderation means balance of all senses and faculties nothing more or less than needed for the purpose. Cultivating moderation will rein in over consumption; conserve the planet's resources, and help facilities save more money. Lack of moderation also leads to hoarding. Individuals, community's nations hoarding resources and monopolizing the gifts of Mother Earth will reduce only when non possessiveness develops in hearts.

Regular practicing of meditation reins in though pollution and creates an inner environment conducive to following yam. We realize that the tree bird and fish all have the same life force flowing through them, all droplets of the same ocean of life. The interconnectedness of existence helps us develop love and reverence towards all creation. As a result we imbibe non-violence, which is the fifth attitude of yam. But the non-violence is of a higher order because now it's not just caring and nurturing it.

YOGA MEANS UNION

Our circle of conscience grows, and we care more. We mould our lifestyle to walk the earth with loving kindness. When such hearts assume leadership roles, their decision will reflect how much they care for the planet. Being in a state of yoga-union simply means doing whatever is necessary in a given moment. And concern for rivers, trees and soil is no different; it is a spiritual movement with an environmental consequence. Now, yoga is not, as many suppose merely about body contortions and breathe control. Yoga means union. This means that sitting right here, you are capable of experiencing the entire world as a part of yourself. This is not an ideological statement, for the yogi, this is a living experience. Unfortunately human consciousness has grown so fragmented that most people have forgotten that their bodies are just offshoots of this planet inclusiveness have turned into environmental slogans, scientific theories and metaphysical.

Modern physics tell us that the universe is just a tremendous dance of energy. Once you know this experimentally, you are in a state of yoga. Once you are in such a state of experiential knowing, would anyone have to instruct you? Plant trees, conserve soil, rejuvenate rivers; protect forests, save the world? Why would it even be necessary? You do not become spiritual by praying, by going to temples, mosques and churches; you become spiritual only when you understand that you are mortal. The

pandemic has placed our mortality squarely before us. The ecological question has also placed our mortality squarely before.

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