A letter to fellow citizens of Earth

1JUNE2022
STOCKHOLM+50

We must become good ancestors and better neighbours.

Join us.

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Dear fellow citizens of Earth,

Our home, planet Earth, is in jeopardy. Earth provides us with sustenance and shelter, inspires reverence, and nurtures our dreams. But we are pushing the planet's systems to the edge, threatening our own well-being and that of future generations. We, the writers of this letter, are natural scientists, engineers, social scientists and scholars from many disciplines and countries. We see the evidence of global environmental change, assess its impacts, untangle its causes, and see the connections between our social and environmental challenges.

We humans are ultimately responsible for the crisis, but to varying degrees: a minority are responsible for amajority of the damage, while those least responsible are hit hardest by the impacts. This letter is an urgent call to our global neighbours, to acknowledge the crisis, make personal and collective commitments in line with differences in privilege and responsibility, and work towards transformative change.

From 1972 to 2022

Fifty years ago, on the eve of the 1972 Stockholm Conference, agroup of 2,200 scientists signed aletter–the Menton Message–to their then 3.5 billion neighbours. They warned about the ongoing environmental crisis and nuc lear arms race, and about the possibility of extinction of life on Earth.

Much has happened since 1972. While the world's population has doubled, global GDP has increased almost five-fold. Human ingenuity and cooperation have led to more food production and better water supply and sanitation. The digital revolution has dramatically increased our ability to communicate and to access information. Scientists discovered the hole in Earth's ozone layer and what caused it; citizens mobilized, and an unprecedented global agreement followed. As a result, the ozone layer is healing. We have also brought back tigers and pandas from the brink of extinction. Electricity from the sun was aglimmer in 1972 and is now afast - growing energy source. Yet many of the environmental threats identified in 1972 persist today, and new ones have emerged. We continue to poison food chains around the world with the chemicals that we make and use every day. Air pollution has dipped in some places but increased dramatically in many others. Around 1million animal and plant species are threatened with extinction today. And of course, global climate change is here, triggering more floods, droughts and heat waves, melting icecaps, and flooding coastlines. The entire planet's life-support systems are now under threat.

Socially, since 1972, poverty has diminished overall but is still significant. Inequality among countries has declined, but inequality within countries has increased. Political turbulence and conflict persist, and the threat of anuclear war has resurfaced. Interconnected problems The environmental and social predicaments we face today are interconnected. Actions that contribute to the destruction, depletion or disruption of nature lead to both unsustainability and injustice. The richest 20% consume about 80% of the world'sresources. And the top 10% emit as much carbon dioxide as the bottom 50% do. This consumerist lifestyle of a minority has led to loss of species, pollution, and climate change—all of which not only threaten our collective future but also the lives and livelihoods of many people today, especially the poorest and most marginalized. Dams, mines and large-scale monocultures have come at the price of dispossession and pollution, typically borne by a few. Industrial workers breathe polluted air in manufacturing hubs that feed global consumerism.

Root causes

After 50 years, pro-environmental action seems like one step forward and two back. The world produces more food than needed, yet many people still go hungry. We continue to subsidize and invest in fossil fuels, even though renewable energy is increasingly cost-effective. We subsidize private cars instead of building public transit. We extract resources where the price is lowest, often in direct disregard of local rights and values. These and many other contradictions are rooted in three main dynamics.

First, individualistic, materialistic, exploitative short-term thinking has led us to lose sight of the public good. Consumerism and self-indulgence are glorified, while they result in ill-health, injustice, and apathy.

Second, a focus on economic growth distracts from achieving well-being and happiness. Unchecked growth destroys our shared resources. Similarly, although technological innovation has allowed us to sidestep some natural limits, the belief that we can bend all nature to our will through the unrestricted use of new technologies is an illusion.

Third, current economic, political and social institutions are failing us. The economic system concentrates financial power in the hands of a few and legitimizes relentless pursuit of profits, manipulation of citizens as consumers, and valuation of nature solely for short-term economic gain.

Political systems do not prioritize the public good, lack accountability, and foster false dreams and divisiveness. And social institutions of racism and patriarchy continue to legitimize the deprivation of and environmental impacts on people of colour, indigenous communities and women.

Way forward

The worst fears of the Menton Message may not have come about, but its authors saw the future. Fifty years on, the work of thousands of scientists and scholars has shown that we are closer to the brink in many ways. On the occasion of Stockholm+50, we call for multiple actions towards a safer and better future.

First and foremost, we must redefine what societies and individuals strive for. Personal well-being must focus on physical and spiritual health, community and peace. And this must be coupled with concern about the collective future, the dignity of fellow humans, and the well-being of non-humans.

Second, we must recognize the responsibilities of the privileged. Those who consume too much must scale back and make space for the disenfranchised and disempowered. Even lifestyles that do not seem lavish are far from sustainable because of systemic distortions, such as fossil fuel subsidies and covering up of pollution costs.

Third, collective action is essential to correct these systemic distortions. While individuals can and must act, they cannot make change happen alone. Making public transportation available and accessible or redefining what constitutes a good life can spur behavioural change. We must shift to an economy of cooperation and sharing, instead of competition, accumulation and planned obsolescence. Politically, we must deepen democracy and strengthen participatory governance. Socially, we must prioritize compassion and collaboration in our families, communities and nations. Turning specifically towards **national leaders**, we urge them to meet current international commitments – whether

towards reducing pollution, improving conservation, or reversing climate change. This is a critical first step that will build trust. Naming and acclaiming those that deliver on pledges, will inspire and empower action. Turning then to the **community** that we, the writers of this letter, come from, we recognize the progress made in 50 years, and call on fellow scientists and scholars to reshape the academic enterprise to maximize our positive impact in our communities and in the world. We must build bridges across disciplines, geographies, and income levels and make technological innovation socially responsible and ethical. We must practice collaborative, inclusive and holistic science. We must engage in teaching, research and application of knowledge that secures sustainability, justice and dignity.

Finally, we call upon all individuals – parents or children, farmers or industrialists, scholars or students, heads of state or religious leaders – to become good neighbours and ancestors.

Let us collectively strive for dignity, justice, peace and sustainability for all humans and all species, for today and for the future.

> *"technology empowers us to change the world -- science predicts its impacts and social science illuminates our motives. But only an ethical framework tells us whether and how we should change it. A holistic environmental ethic, encompassing concern for today for all humans, for future generations, for other species, and for participatory process, must be the beacon for all research and action." - SharachchandraLele*

Signed

Co-Chairs of the Expert Writing Group

Maria Ivanova, University of Massachusetts Boston, USA

SharachchandraLele, Ashoka Trust For Research in Ecology and the Environment: Indian Institute for Science Education and Research Pune; Shiv Nadar University, India, Global Land Programme SSC

Expert Writing Group

Ajibola Anthony Akanji, Lead City University, Ibadan, Nigeria

Dipesh Chakrabarty, The University of Chicago, USA

Sandra Díaz, CONICET and the Universidad Nacional de Cordoba, Argentina

Kristie Ebi, University of Washington, Seattle, USA, Co-chair Future Earth Assembly, and Earth Commissioner

Carl Folke, Beijer Institute of Ecological Economics of the Royal Swedish Academy of ciences and founder of the Stockholm Resilience Centre, Sweden

Ke Gong, Nankai University, China

Saleemul Huq, International Center for Climate Change and Development, Bangladesh

Cristina Yumie Aoki Inoue, Radboud University, Netherlands and University of Brasília,Brazil

Måns Nilsson, Stockholm Environment Institute, Sweden

Karen O'Brien, University of Oslo, Norway

David Obura, CORDIO East Africa, Kenya, Earth Commissioner

Mouhamadou Bamba Sylla, African Institute for Mathematical Sciences, Rwanda

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1st International Geodiversity Day

celebrations

INDIA is blessed with great Geological Diversity and exotic geological heritage of Global significance. UNESCO 2021 declared 6th October as International Geodiversity Day. SES, jointly with other organisations, is organising visit to various interesting Geological Heritage sites.

DON'T MISS THE OPPORTUNITY to see Earth's own Heritage with expert geoscientists and understand the evolution of Life on Earth and ancient vegetation, climate change and extinction of GREAT DINOSAURS.....

We are organising FOUR group field visits to promote GEOTOURISM in India guided by acclaimed scientists

Zawar Multi-heritage & Jhamarkotra Stromatolites, Rajasthan
11-13 October 2022

ZAWAR near Udaipur is of interest because it has been globally recognized as the world's FIRST ZINC SMELTING SITE. It is also famous for ancient Jain Temples. Stromatolites (fossil blue-green algae) are oldest evidence of life on Earth formed between 3900 million years to 541 million years. The stromatolites is exposed at JHAMARKOTRA, Rajasthan, about 25 km southeast of Udaipur. Also visit FORTS of Rajasthan in Udaipur.
Base Station: Udaipur, Rajasthan; Participation Fee: Rs. 15,000/-

Bagh Dinosaur National Park, Dhar District, M.P.
5-8 November 2022

BAGH Dinosaur Geoheritage Site, Dhar, MP is one of the best exposed dinosaur fossil site of India. See exotic fossil records of dinosaur nests, fossil woods, ancient marine life etc. Visit ancient Bagh Caves. A Fossil museum at ancient Fort city Mandu and visit monuments and palaces. The Fossil Park is under development as a Geopark by Government of Madhya Pradesh.
Base Station: Indore, M. P.; Participation Fee: Rs. 15,000/-

Kachchh: fossiliferous sedimentary package for Indian Geopark
12-16 November 2022

The Kachchh, white desert of India, is well known for its 250-65 million years old well preserved marine fossils. *Kachchh Basin showing three distinct rocky uplifts– 'Mainland', 'Wagad' and 'Island belt' separated by the Quaternary geomorphic features 'the Ranns' and 'the Banni plains'.* See art and culture of western Gujarat.
Base Station: Bhuj, Gujarat; Participation Fee: Rs. 20,000/-

Exotic marine fossils & nature museums of Perambalur and Ariyalur Districts, Tamil Nadu
19-22 November 2022

Well preserved marine fossils ammonites, belemnites and other molluscs, echinoids, coral-algal reefs, bryozoans, shark teeth, dinosaur egg, dinosaur bones, and fossil wood represent a rich 75-65 million year record of life. Visit newly build ammonite museum at Peremblur and exotic Sathnur fossil wood park.
Base Station: Chennai, Tamil Nadu; Participation Fee: Rs. 15,000/-

REGISTER IMMEDIATELY (up to ~~30 July'22~~)
HURRY extended to **31st August**

CONTACT:
The Society of Earth Scientists
www.earthses.org
Email: india.ses@gmail.com; +91 7607374176