



The Road to COP27:
Climate Change and Health Through Three Lenses

Virtual Summit
October 15, 2021
11:00am EST–3:00pm EST

Consortium of
Universities
for Global Health 

Hosts:
University of Edinburgh • University of Pittsburgh • Johns Hopkins University
University of Wisconsin–Madison • Boston College

Summary of The Consortium of Universities for Global Health’s Symposium

The Road to COP 27: Climate Change and Health Through Three Lenses

Date October 15, 2021

11am-3pm EST

Event recordings: <https://www.cugh.org/events/cughs-virtual-summit-the-road-to-cop27-climate-and-health-through-three-lenses-free-and-open-to-all/>

Accompanying Paper: Promoting Global Health and Equity Through Climate Policies

https://1cnvng2oul8e2upwpp47ustn-wpengine.netdna-ssl.com/wp-content/uploads/sites/95/2021/10/CUGH-White-Paper_Oct-22-2021_FINAL.pdf

CUGH Virtual Summit: The Road to COP27

Climate Change and Health Through Three Lenses



Introductory Remarks

11:00am EST

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Welcome



Michele Barry
Director
Center for Innovation
in Global Health,
Stanford University

Introduced by



Agnes Binagwaho
Former Minister of
Health, Rwanda



Jonathan Patz
Director
Global Health
Institute, University of
Wisconsin

Introduced by



Victor J. Dzau
President
National Academy of
Medicine



Maureen Lichtveld
Dean of Public Health
University of Pittsburgh

Introductory Remarks

Welcome:

- Michele Barry, Chairperson of the Board of Directors, CUGH, Director of the Center for Innovation in Global Health Stanford University

Speakers:

- Jonathan Patz, Professor and Director of the Global Health Institute at the University of Wisconsin introduced Prof. Agnes Binagwaho, Former Minister of Health, Rwanda and Prof., University of Global Health Equity
- Dr. Maureen Lichtveld, Dean of Public Health, University of Pittsburgh introduced Dr. Victor J. Dzau, President of the National Academy of Medicine, USA

Context and Timing: This CUGH webinar on climate change comes just days ahead of the U.S. National Academy of Medicine (NAM) annual conference, where climate change is now the top priority of the NAM. NAM has also launched a Grand Challenge on Climate Change and Human Health. It is also just weeks ahead of the United Nations Framework Convention on Climate Change's (UNFCCC) 26th Convention of the Parties (COP26) in Glasgow.

The importance of focusing on low- and middle-income nations: in Africa, the annual energy use is 1.11 metric tons of CO₂ per person, compared to 16.06 metric tons in America. At the same time, the African continent is highly vulnerable to climate risks, such as weather disasters, crop failures and infectious diseases. The impact of climate change falls disproportionately on LMICs. Investments are needed in LMICS to assist them in mitigating and adapting to climate

change. Climate change is driving an increase in natural disasters and a shift in infectious diseases. Africa should be granted more time to transition away from fossil fuels. A One Health approach is very useful in addressing climate change.

The National Academy of Medicine's Grand Challenge on Climate Change and Health: Recognizing that climate change is a public health crisis, health professionals have an obligation to act. As a first step, the health sector must reduce its own emissions, and the NAM has begun an Action Collaborative on Decarbonizing the Health Sector. This initiative focuses on decarbonizing four areas of healthcare: supply chains, healthcare delivery, educating the workforce, and policy financing and metrics. Healthcare professionals have an obligation to act to achieve good health outcomes and put equity at the heart of their actions. A cross-sector roadmap for systems transformation, including green financing and nature-based solutions to prioritize health and equity will be a broader action of the NAM on climate change. We need to address green financing, nature-based solutions and greening cities through innovation.

Key recommendations:

- Health concerns over climate change risks, especially in resource poor settings, are recognized as urgent. There will be a demand for concerted international efforts to reduce vulnerabilities. At the same time, large health benefits are possible from a low-carbon global economy.
The purpose of this webinar is to not only inform COP26 in Glasgow but also to look ahead and provide solutions for the COP27 which will be occurring in Africa in 2022.
- Wealthy countries must do much more to mitigate climate change and accept their responsibility in causing the problem, for which LMICs disproportionately suffer.
- The health sector must act on climate change by reducing its' own GHG emissions. Climate change solutions with health and equity as a priority will require systems-wide cross-sector transformational change beyond the health sector.

Additional Links:

[Grand Challenge on Climate Change and Human Health](#)

CUGH Virtual Summit: The Road to COP27

Climate Change and Health Through Three Lenses

Session 1- Pragmatic Policy Recommendations for COP26 Part 1: Energy, Transportation, Construction, Agriculture and Manufacturing

11:15am EST

Moderator



Maureen Lichtveld
Dean of Public Health
University of Pittsburgh



Joy St. John
Executive Director
Caribbean Public Health Agency (CARPHA)



Gary Minsavage
Sr. Environmental Health Advisor
Exxon Mobil Corporation,
Corporate Strategic Planning



Alexander Müller
Director
TMG - Think Tank for Sustainability



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[Session 1: Pragmatic Policy Recommendations for COP26 Part 1: Energy, Transportation, Construction, Agriculture and Manufacturing](#)

Moderator:

- Maureen Lichtveld, Dean of Public Health, University Pittsburgh

Speakers:

- Alexander Müller, director, TMG-think tank for sustainability
- Joy St. John, Executive Director of the Caribbean Public Health Agency (CARPHA)
- Gary Minsavage, Sr. Environmental Health Advisor, Exxon Mobil Corporation

If “Food Waste” were a country, it would be world’s 3rd largest emitter of GHGs. Establishing a sustainable food system will represent the largest transformation we have ever seen. We should start by changing the economics of food, for example and end perverse subsidies for monoculture farming that favors large multinational companies like Monsanto. Small farmers are underpaid and at the risk of furthering biodiversity loss. We need to talk about the real prices of the food we eat. Cheap food is expensive for the people and the planet. The costs of the current system are borne by the planet, and no one is paying for them directly. We need to redefine dietary guidelines and examine what food is good for human health and good for the planet We should also look back to the Rio 1992 Earth Summit and adopt the “polluter pays principle.” The TEEBAgriFood framework has been developed to assess flows between produced, natural, social and human capital.

The Caribbean is a region with a high level of vulnerability from climate extremes, yet regionally having little contribution to the problem, except for tourism. Air travel and high energy consumption from activities related to luxury tourism. CARPHA conducts environmental monitoring and assessment, and releases health climate bulletins and an annual State of Public Health. CARPHA leads a cross-sector Caribbean Action Plan on Health and Climate Change.

In 2040, there will be 9 billion people with increased living standards, a large middle class and greater demand for energy and electricity. This will need to be addressed. Exxon is in favor of putting a price on carbon and strives to be a leader in pushing for a lower carbon future. They are planting 25 billion trees annually for carbon offsets and is the world's leader in carbon capture and sequestration (CCS) technology. They are promoting energy access in poor-income settings. However, Exxon is accounting for its operational emissions not from the emissions from the combustion of the fossil fuels that it produces.

Key recommendations:

- Join forces in redefining dietary guidelines that promote food that is good for people and the planet.
- Acknowledge regional vulnerabilities in the Caribbean, the role of tourism in exacerbating the climate crisis, and investments required to assist regions in GHG emissions reductions.
- Take a cross-sector approach to climate mitigation, including carbon offsets with tree-planting, carbon capture and storage and put a price on carbon.
- It is extremely important that methane emissions be reduced rapidly. Subsistence farmers receive very little for their food production. Small-scale farmers suffer significant costs from emissions produced by the top GHG emitters.
- Incentives within the current food system need to change. It is necessary to utilize the one health approach. Policymakers, the scientific community and other stakeholders need to address these challenges.

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Session 2 – Pragmatic Policy Recommendations for COP26 Part 2: Green Financing, Nature Based Solutions, Healthy Cities

12:20pm EST



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Moderator



Elizabeth Grant
Assistant Principal
(Global Health) and
Director of the Global
Health Academy,
University of Edinburgh



Susan Gardner
Director, Ecosystems
Division
United Nations
Environment Programme



Charles Okeahalam
Chairman
Amref Health Africa



Nnoli Edozien Ndidi
Chair
Circular Economy
Innovation
Partnership

[Session 2: Pragmatic Policy Recommendations for COP 26: Green Financing, Nature-Based Solutions, Healthy Cities](#)

Moderator:

- Elizabeth Grant, Assistant Principal for Global Health and Director of the Global Health Academy, University of Edinburgh

Speakers:

- Susan Gardner, Director, Ecosystems Division, United Nations Environment Programme
- Charles Okeahalam, Chairman, Amref Health Africa
- Nnoli Edozien Ndidi, Chair, Circular Economy Innovation Partnership

Healthy people cannot thrive on a sick planet. We need a more holistic approach towards health that includes nature-based solutions and the One Health framework. The United Nations Environment Programme supports implementing nature-based solutions such as ecosystem rehabilitation, forest conservation and adaptation projects. These multidisciplinary solutions have wide-ranging impacts on human health and well-being while also restoring natural habitats and systems.

Green financing has potential in Africa where financial resources are lowest. By taking lessons from the French green financing fund, African governments can create a similar model. We are spending too much time debating the solutions. We must implement solutions tailored for different populations. Green financing can scale resources to solve environmental challenges in the conservation and renewable energy arenas.

The poor, women and children are disproportionately affected by climate change. Climate change exacerbates poverty and poor people can take actions that are not good for the environment nor ultimately for their own long-term health. There is insufficient input from African representatives at the environmental discussions. We particularly need to see community representatives from low-income settings providing input and guidance into these discussions.

Small to medium-size companies are creating innovations. It is also important to listen to indigenous knowledge systems which need to be integrated into our approach to climate change and biodiversity losses.

African and other developing countries must implement innovative, holistic green financing solutions to reduce the impact of climate change. African governments must also enhance their ability to raise money.

Urbanization is an opportunity to implement the circular economy principles. Providing green space in cities can improve people's mental health. We need a just transition that takes into account how climate change affects people. It is necessary to include young people in the conversation because they bring a new perspective. For young people, the decentralized finance (DeFi) system based on block chains is normalized and they can decide where their money goes. Many large African businesses use the Seven Pillars Approach of the circular economy. This approach advocates the inclusion of all business functions in assessing ESG (environmental, social, and governance) criteria, and is designed to close the sustainability gap. One of the seven pillars is the cultural pillar. We must dig into our indigenous knowledge where sustainable systems already exist. The circular economy framework should be used to build healthy cities that integrate social agenda with economic agenda.

Climate change needs to be put at the same level of concern as COVID-19. There is an extensive extraction of Africa's natural resources underway.

Key recommendations:

- Heal our relationship with nature through conservation and rehabilitation projects. Address economic factors driving natural habitat destruction. Promote sustainable natural resource-based businesses. Raise ambition to create a healthy, climate-stable future. Indigenous voices and expertise need to be utilized in conservation and restoring natural habitats. We need to understand indigenous knowledge systems.
- Build cities based on the circular economy principles. New action systems must be more circular, than linear. Use indigenous knowledge and existing systems. Include young people in the conversation. Put social and economic justice at the core of solution creation and implementation. Mobilize public and private funds to address this crisis.
- Put a fair price on carbon
- Increase input from LMICs esp. those most affected by climate change

Additional Links:

[Continuing Plunder! Brutal Extraction of Africa's Resources](#)

[The Seven Pillars of the Circular Economy](#)

[Planetary Health Alliance Website](#)

[Global Consortium on Climate and Health Education Website](#)

[AMREF](#)



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Session 3- Agenda Items for COP27 in Africa
1:35pm EST

Moderator

 Keith Martin Executive Director Consortium of Universities for Global Health	 Laetitia Sieffert Programme Management Officer Convention on Biological Diversity, UN Environment Programme	 Caradee Wright Senior Specialist Scientist South African Medical Research Council	 Deoraj Caussy Epidemiologist Integrated Epidemiology Solution & Network of African Science Academies	 Diarmid Campbell- Lendrum Head, Climate Change and Health Programme World Health Organization
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[Session 3: Agenda Items for COP27 in Africa](#)

Moderator:

- Keith Martin, Executive Director, Consortium of Universities for Global Health

Speakers:

- Laetitia Sieffert, Programme Management Officer, Convention on Biological Diversity, UN Environment Programme
- Caradee Wright, Senior Specialist Scientist, South African Medical Research Council
- Deoraj Caussy, Epidemiologist, Integrated Epidemiology Solution
- Diarmid Campbell-Lendrum, Head, Climate Change and Health Programme, World Health Organization

This session includes solutions that should be addressed at COP 26 and items that should be on the program for COP 27, Nov. 2022 in Egypt with a specific emphasis on Africa. Both COP 26 and COP 27 are opportunities to simultaneously deal with the dual existential threats of climate change and biodiversity losses. Since both have common anthropogenic drivers, both can be addressed by common solutions that will also have a powerful impact on the social

determinants of health and the broader SDG's. We have the solutions to address these challenges. It is now a matter of political will and achieving obligatory commitments to keep global warming below 1.5C by 2030. Tax shifting will liberate resources to achieve this target along with capacity building to ensure that the operational capabilities exist to support the implementation of programmatic solutions.

Health and well-being depend on nature which is deeply impacted by climate change. We need to focus on the linkages between health and biodiversity. Ecosystem services provide food water and oxygen that are essential for life. The natural world improves our mental health outcomes. Biodiversity supports human health and intact ecosystems mitigate against climate change. There needs to be increased uptake of a one health approach which will address climate change, biodiversity losses and help achieve the sustainable development goals. This is an opportunity to leverage indigenous knowledge to protect ecosystems. The decline of biodiversity undermines the web of life and the achievements of SDG-3. Protecting ecosystems mitigate against climate change through carbon sequestration. This will also protect biodiversity. The destruction of ecosystems, the overharvesting of wildlife and the illicit trade in wildlife are also underlying causes of pandemics.

Despite being the lowest carbon dioxide emitting continent in the world, Africa faces severe climate sensitive health effects which include vector borne diseases such as malaria, food insecurity, malnutrition, and extreme weather effects such as drought and flooding.

The usage of wood, charcoal, and coal as predominant sources of energy in many parts of the world needs to cease and instead a transition towards a multifaceted energy mix will assist in decarbonizing the world and thereby reduce consequential health and environmental impacts. To do this, governments and regulators should strengthen the market for low carbon energy through predictable off-take arrangements, utility purchase arrangements, and feed-in tariffs.

The interplay of climatic hazards contributes to high health impacts in Africa. Moreover, due to poverty and poor infrastructure, Africa has low adaptive capacity to natural disasters. Corruption is a major obstacle to addressing climate change and achieving broader sustainable development goals. It erodes confidence in the government and results in the massive loss of resources that belong to the public to address climate change and fund public goods.

As health is central to sustainable development, resilient health systems with early warning elements should be implemented to combat risk in real time. Rather than subsuming 'Health' under environmental issues, intersectoral collaboration emphasizing health as a unique entity will aid prioritization of disease-related resolutions. Ultimately a global approach is needed to increase health quality in Africa which requires adequate funding and partnerships. Blueprints for sustaining commitments in finance and the transfer of technology must be translated into action.

Globally, many countries have discussed methods to tackle climate change, yet the ultimate obstacle is the deficit in finance to implement these plans- particularly in the least developed

countries. Moreover, major issues that are byproducts of climate change like food security, respiratory disease, mental health illness, and non-communicable diseases are not very well represented and require more research. The goals and initiatives identified in the COP26 Special Reports remain as critical guidelines for reducing climate change health impacts. In support of the COP26 initiatives, countries commit to the following: Conducting health vulnerability and adaptation assessments within populations, developing a Health National Adaptation Plan (HNAP), and using the V&A and HNAP to facilitate access to climate change funding.

Key recommendations:

The post-2020 Global Biodiversity Framework identifies solutions towards advancing climate and health:

- Transformative change through 8 interdependent transitions (GBO-5).
- Uptake of a One Health approach with a strong environmental pillar.
- Leverage ecosystem-based approaches and nature-based solutions.
- Utilize a whole-of-society and whole-of-government approach.
- Leverage the expertise and traditional knowledge of IPLCs and gender-specific knowledge of biodiversity.
- Increase capacity building to protect at least 30% of the ecosystems within Africa.
- To support the development of a low carbon energy market, governments and regulators should administer appropriately subsidized loans and increase carbon prices once technology is accessible and available to assist the transition.
- Energy microgrids must be implemented for remote and climate sensitive areas to decentralize the energy monopolization of coal and promote clean energy usage.
- In the clean energy space, there is no room for corruption, and it must be eradicated.
- Health and government officials should take field trips to South Africa’s most polluted areas and discuss with the stakeholders who should be removing and reducing pollution.
- The Health National Action Plan (HNAP) is a blueprint for action that should be followed.
- Access to the Green Climate Fund must be facilitated for African nations
- Resilient health systems with technical expertise and financial capital must be established
- corruption results in massive losses of resources and national international efforts need to be implemented to address this challenge and repatriate funds that belong to African states.
- Previously only 13% of the IUCN’s critical ecosystems were protected. By 2030, that protection rate is targeted to be increased to 30%. To do this, capacity building must be a primary focus. Understanding the role and importance of biodiversity in human health will also contribute towards achieving this ambitious target.
- A one-health approach can be used on the African continent and beyond.

- Governments need to grasp that protecting ecosystems will be very valuable in achieving the social determinants of health.
- Sustainable tourism has garnered interest from governments to conserve ecosystems and address the social determinants of health for rural populations.
- We need short-term actions now because the long-term goals are ineffective. People promise to track compliance but tend to stray from doing this. Targeting short-term goals helps reduce immediate threats
- Strengthening health systems resilience is needed to protect them from the impacts of climate change.
- Reducing carbon emissions = massive health benefits
- Mobilize public health workers to prioritize health as a human right.
- Advocate for the appropriate nationally determined contributions to reduce global greenhouse gas emissions by 50% by 2030.

Additional Links:

[Post-2020 Global Biodiversity Framework](#)

[“2021 Global Conference on Health & Climate Change”; Glasgow, UK](#)

[“The Health Argument for Climate Action - COP26 Special Report”](#)

[IPBES Report Biodiversity](#)

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Concluding Fireside Chat: Next Steps to Bridging the Policy Implementation Gap

2:40pm EST



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Moderator



Philip Landrigan

Director
Global Public Health Program
and Global Pollution
Observatory
Boston College

Closing Comments



Achim Steiner

Administrator
United Nations
Development
Programme



Keith Martin

Executive Director
Consortium of
Universities for Global
Health

[Fireside Chat: Next Steps to Bridging the Policy Implementation Gap](#)

Speaker:

- Achim Steiner, Administrator of the United Nations Development Program (UNDP)

Moderator:

- Philip Landrigan, Director, Global Public Health Program and Global Pollution Observatory, Boston College

In discussing the next steps towards combating climate change, Achim Steiner reveals the fragility of the phenomenon we are facing. The current trajectory of climate change must be abruptly shifted, otherwise, the 1.5-degree limit to global warming will not prevail. Mr. Steiner examines the growing sense of frustration and helplessness among younger generations regarding the detrimental effects of climate change. He points out that many profound commitments have been made from the European Parliament, funders and others to address climate change. However, he stresses that deeper and quicker reductions in greenhouse gases must be made if we are to meet the 2030 timeline. If we have not achieved the necessary reductions by 2030 we will not limit global warming to 1.5°C He believes that the world is not yet focused on the extreme loss of biodiversity we are seeing. Our ability to understand the connection between biodiversity, conservation and resources is fundamental. He emphasizes that it is vital that we look at climate change, biodiversity losses, the degradation of our environment and human wellbeing as one, integrated set of challenges that can and must be addressed together. Although we are the most technologically advanced society in history, we also know that we are inseparable from our natural world. He urges the health community to get more deeply involved in these challenges and recognize that human health and well-being is much broader than a narrow medical vision and we need to look at the social determinants of health and environmental impacts on well-being. He shares how more than 7 million people die per year from indoor and outdoor air pollution. He provides a hopeful challenge that if we act vigorously and effectively now, we can avert profound threats to our health, security and development in the future. There is hope for a cleaner world and we must harness that hope.

Key recommendations:

- The Sustainable Development Goals are deeply underestimated but are an ideal blueprint encompassing global needs and climate change.
- Large corporations and organizations can make a difference if they so choose to prioritize healthy conversation on greener energy and enacting upon their goals.

Additional links:

[UNDP's activities to address climate change](#)

[Lancet Commission on Pollution and Health](#)

[Human Health and Ocean Pollution](#)

Closing Remarks

Speaker:

- Keith Martin, Executive Director, Consortium of Universities for Global Health

UN climate change Conferences of the Parties (COPs) produce accords based on the consensus of the approximately 200 nations that attend them. Any agreed targets achieve the lowest common denominator. They are voluntary (thus too easy to ignore) too low, and too slow to achieve. This is a recipe for disaster. So, what would be a path forward that could stop global warming from exceeding 1.5C? Can we also use this moment in time to address the other existential threat to our health, security and development: the collapse in global biodiversity? The good news is that both can be addressed simultaneously since the anthropogenic drivers of both crises are very similar. Whether we will act in time is another matter.

First, it is important to recognize that 80% of greenhouse gas emissions come from just 20 countries. Four sectors: electricity, agriculture, industry, and transportation account for 84% of those emissions. To keep global warming below the agreed 1.5C target, these 20 countries need to agree to obligatory, not voluntary targets. Greenhouse gas emissions must be lowered by 7% per year starting now, to achieve a 50% reduction by 2030. Penalties for failing to meet this target could be through a cap-and-trade system amongst these countries or import tariffs applied to exports from the nations within this group that do not meet their targets.

Second, governments need to shift the over \$500 billion spent every year on subsidies to the fossil fuel sector and use these resources to decarbonize their economies and assist low-income nations to adapt to the climate change that is inevitable.

Third, we not only need to stop releasing greenhouse gases into the atmosphere, but we must also pull CO₂ out of the atmosphere. An extremely efficient way to do this is to protect natural carbon sinks. The International Union for the Conservation of Nature (IUCN) has a Red List of critical ecosystems that are exceptionally rich in biodiversity, and most are also carbon sinks. Protecting these areas will address climate change, biodiversity losses and protect the ecosystem services vital for human wellbeing. Indigenous communities have tenure over many of these areas. This is an opportunity to work with them and use their deep historic knowledge to protect these areas. Sustainable ecotourism can generate resources that can improve the social determinants of health for communities living near these areas, many of which represent some of the most vulnerable people in the world.

We know how to keep global temperatures from rising beyond 1.5°C. Whether this happens is now a political choice. The healthcare community, other professional associations and the broader public must make it clear to politicians and political parties that they will only get their vote if they clearly demonstrate through their actions that they are serious about addressing climate change (and I would argue, simultaneously address the global extinction crisis). As the UNDP's Administrator Achim Steiner said, which has been echoed by UNEP's Executive Director Inger Anderson, it is not too late to act, but the window to address climate change is closing quickly.

Additional Links:

[UNEP: Emissions Gap Report 2021](#)

[UNEP Climate Action Plans](#)

[UNDP and Climate Change](#)

[IUCN Red List of Critical Ecosystems](#)

[WHO and the CBD: Health and Biodiversity](#)

[WHO, The Health Argument for Climate Action](#)