The Rt Hon Baroness Scotland QC Commonwealth Secretary-General Commonwealth Secretariat Headquarters Marlborough House, Pall Mall London SW1Y 5HX

21 June 2021

Dear Baroness Scotland,

We write to you as co-convenors of the 2021 Commonwealth Science Conference and Presidents of science academies in Commonwealth countries, in order to highlight some key recommendations from the conference for joint action on a sustainable and resilient recovery. We were delighted that you were able to attend the closing session of the conference and hear some initial reflections first hand. What follows is some more considered thoughts. While the Commonwealth Heads of Government will no longer be meeting in Kigali later this month, we would be most grateful if you could bring these to their attention as and when appropriate; and we would welcome any opportunities to engage on these issues with Commonwealth policy makers, noting that there are likely to be a number of relevant high level Commonwealth meetings ahead of the COPs.

As you will recall, in February this year, around 300 future scientific leaders from over 30 Commonwealth countries assembled virtually to consider how science could help address a series of crucial development challenges related to energy, ecosystems and society. These early career researchers were nominated by partners and stakeholders including Commonwealth science academies, and they led the challenge-focused elements of the conference. A number of their findings which we endorse – and which build upon a call from the Commonwealth science academies in 2020 to work together to ensure a resilient and environmentally sustainable recovery from COVID-19¹ - are outlined below.

As you rightly acknowledged in your closing address to the conference, science has a fundamental role to play in dealing with the climate crisis; reducing carbon consumption; attaining net zero commitments; addressing the social and health impacts of covid-19; restoring the health of our land, forest and oceans; and achieving a global green recovery. 2021 is a critical year for coordinated action on many of these challenges, with CHOGM one of the key early milestones, to be followed by CBD COP 15 in Kunming in October, COP26 in Glasgow in November; as well as marking the start of the UN Decade of Ocean Science and the UN Decade of Ecosystem Restoration.

With all of this in mind, the key points that came out of the conference that we would like to draw to your attention, and that of the Commonwealth Heads of Government, are as follows. We call on Commonwealth Heads of Government to:

• Develop realistic, evidence-based roadmaps to reaching net zero carbon emissions by the middle of the century. This is critical to meet, or to get as close as possible to, the goals of the Paris climate agreement, namely limiting global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. Given the diverse energy requirements, consumption patterns, resources and levels of CO₂ emissions of Commonwealth countries, a similarly diverse range of pathways to net zero will be required. These should draw on shared, collaborative and equitable solutions, integrate energy resilience goals, promote transition from a linear to a circular economy, and working together, facilitate the provision of low-cost renewable technologies to low- and middle-income countries.

- Ensure that nature and biodiversity are properly valued and accounted for in national and international decision making. Human demands on nature are vastly outweighing nature's capacity to provide the goods and services that humanity depends upon. This is a critical threat to the future of human society, but is not reflected in traditional economic indicators. It is therefore crucial that Commonwealth countries work together to adopt decision-making frameworks which take into account the impact of production on biodiversity. The concept of the 'blue economy' a key focus of Commonwealth collaboration, and a crucial shared interest given the high proportion of Commonwealth countries which are ocean states provides a good example of such a framework, which has the potential to develop economies and drive innovation whilst at the same time advancing social equity and preserving environmental sustainability, all of which should be supported and strengthened.
- Strengthen cooperation on research, assessment, monitoring and data-sharing relating to the health of the oceans. Building on the momentum generated by the signing of the Commonwealth Blue Charter in 2013 and subsequent cooperation on the 'blue economy', the Commonwealth as a group of countries which are mostly coastal states, and of which around half are small island developing states provides a unique forum and opportunity for further cooperation on the sustainable stewardship of the oceans. As the UN Decade of Ocean Science gets underway this year, the Commonwealth and its member countries should work together to enhance collaboration in order to better understand, and respond to, the impacts of climate change on the oceans, the full extent of marine biodiversity and how it is affected by human activity, the nature of the deep sea and how best to sustainably drawn upon its resources, and the knowledge and experience of coastal communities.
- Take a 'whole systems approach' to address critical challenges such as biodiversity, climate
 change and other global development challenges in an integrated way. The climate and
 biodiversity crises are fundamentally interlinked. Cross-sectoral and interdisciplinary solutions will
 be essential in order to address them, rather than tackling each challenge in isolation. An approach
 which takes into account the health of earth systems as a whole, and the connections between their
 components, will help to build and safeguard more resilient systems in future.
- Promote greater collaboration on data use between Commonwealth countries. The COVID-19 pandemic underlines the necessity of governments having access to comprehensive, interpretable and accurate data in order to act rapidly to address a fast-moving global crisis. Commonwealth countries have been affected by, and have responded to, the pandemic in a number of different ways, and should work together to develop and implement cooperative frameworks, based on common standards, that enable safe, ethical and timely use of data. Such an approach is critical not only with regard to global health for example through improved monitoring of zoonotic diseases to prevent future pandemics but also, through regular monitoring and access to data on biodiversity and climate change, has the potential to address a wide range of global development challenges in an integrated way. The links between Commonwealth national science advisers, initiated at a previous CHOGM and strengthened since, have been of great value during the current crisis, and provide an excellent model of cross-Commonwealth cooperation that can be learned from.
- Address global inequality when tackling all of these challenges. One of the key discussions at the conference was on what is required for a 'just transition' to a more sustainable Commonwealth, recognising that many of today's most critical challenges have unequal impacts, which are often felt most acutely in the world's poorest countries and regions. These trends have been exacerbated by the COVID-19 pandemic. The diverse membership of the Commonwealth which encompasses countries which are best placed to contribute in terms of resources and infrastructure, as well as many countries which are particularly vulnerable when it comes to energy resilience, adapting to climate change, disaster risk and the primary and secondary impacts of COVID-19 provides a unique opportunity to develop an equitable framework for such cooperation. In doing so, the development of solutions which are 'co-produced' with local communities that are most affected, integrating local and indigenous knowledge and environmental management, should be encouraged.

We thank you again for your participation and consideration of the above. Our academies stand ready to work with you, the Commonwealth Heads of Government, and associated ministerial forums in order to assist with the necessary actions.

Best wishes,

Sir Adrian Smith

President, The Royal Society

Halan

Professor Felix Dapare Dakora

President, African Academy of Sciences

Professor John Shine

President, Australian Academy of Sciences

Azadehowshung

Professor Emeritus. Dr. A K Azad Chowdhury

President, Bangladesh Academy of Sciences

Professor Ishmael Masesane

President, Botswana Academy of Sciences

Professor Beban Sammy Chumbow

President, Cameroon Academy of Sciences

Professor Jeremy N. McNeil

President, Royal Society of Canada

Professor Emeritus Winston A Mellowes

Wik of Millies

President, Caribbean Academy of Sciences

Professor Emeritus Andreas Demetriou

President, Cyprus Academy of Sciences, Letters and Arts

Emeritus Professor S. K. Sefa-Dedeh

President, Ghana Academy of Arts and Sciences

Chandrina Make

Professor Chandrima Shaha

President, Indian National Science Academy

Professor Molibeli Taele

President, Lesotho Academy of Science and Technology

Jundimail

Professor Asma Ismail

President, Akademi Sains Malaysia

Professor Manasse Mbonye

President, Rwanda Academy of Science

Professor Tit Meng Lim

President, Singapore National Academy of Science

Professor Priyan Dias

President, National Academy of Sciences of Sri Lanka

Professor Peter N. Mugyenyi

President, Uganda National Academy of Sciences

Atroly Lours

Professor Wendy Larner

President, Royal Society Te Apārangi, New Zealand

Professor Marcel Jaspars

Mariel James

Vice-President, The Royal Society of Edinburgh, Scotland

Professor Jonathan Jansen

Agusin

President, Academy of Science of South Africa

Professor Yunus D. Mgaya

President, Tanzania Academy of Sciences

Professor Kavwanga Yambayamba

President, Zambia Academy of Sciences