OPENING REMARKS BY THE MINISTER OF HIGHER EDUCATION, SCIENCE AND INNOVATION, DR BLADE NZIMANDE, ON THE OCCASION OF THE ALLIANCE FOR COLLABORATION ON CLIMATE AND EARTH SYSTEMS SCIENCE (ACCESS) VIRTUAL CONFERENCE ON PERSPECTIVES ON GLOBAL CHANGE

8th December 2020

Programme Director;
The NEC and Research Conference Chair, Mr Sikhumbuzo Radebe;
Chair of the Global Change Science Committee, Prof Collen Vogel;
Secretary of the Conference Organizing Committee, Ms Noxolo Madedelwa;
Director of ACCESS Programme, Dr Neville Sweijd;
DSI Officials present
ALL ACCESS NEC members;
All invited presenters and guests;
All virtually connected and physically located mode meetings, in Cape Town, East London, Empangeni, Gauteng, Pietermaritzburg and Thohoyandou;
Members of the media;
Ladies and gentlemen

I am privileged today to be joining you in the Habitable Planet Workshop (HPW) Programme, which is a flagship education and training programme of the Alliance for Collaboration on Climate and Earth Systems Science (ACCESS).

The mandate of the Department of Science and Innovation (DSI) is to provide an enabling environment for the national system of innovation (NSI) to deliver solutions that address the socio-economic and developmental needs and imperatives of the country.

Today, as a result of investments made in key research and innovation areas across the NSI, South Africa is harvesting the benefits of a small but effective science system.

The DSI has been mobilising across the NSI, especially among its entities and the entities of sister departments, specific initiatives that are currently being fast-tracked to support the government's response to the skills revolution of our country.

Our Department stays true to its impact statement, that we are "Enabling South Africa’s sustainable and inclusive development in the face of rapid technological change and innovation".

This, very much in line with our new name, the Department of Science and Innovation, which represents a unique opportunity to demonstrate how science and innovation can contribute to socio-economic well-being.

Our STI missions and priority areas for the next 10 years will be detailed in our Decadal Plan to be finalised and approved soon.
Another critical aspect is the Higher Education, Science, Technology and Innovation Institutional Landscape (HESTIIL) review, which is currently being conducted to determine the future direction and infrastructure requirements of the country’s post school education and STI landscape.

ACCESS is a Department of Science and Innovation and National Research Foundation (DSI/NRF) funded global change programme, hosted by the Council for Scientific and Industrial Research (CSIR).

As you may all know, the Habitable Planet Workshop (HPW) programme works from schools to postgraduate level and aims to increase the number of students participating in science research nationally. Its particular focus is on attracting more black and female students from disadvantaged backgrounds, by creating a safe, supportive and nurturing learning environment that many of our Historically Disadvantaged Institutions still lack, particularly in the field of Earth System Science.

I must say that I am pleased to see the collaborative effort from HPW Alumni representing many South African higher education institutions, including the Cape Peninsula University of Technology, the University of Fort Hare, the University of Zululand, the University of Venda, the University of KwaZulu-Natal and the University of Johannesburg.

The fact that this conference is organised exclusively by black South African (and South African based) science students, is itself symbolically important in terms of our project to decolonize of higher education.

By supporting students who have no internet access at home, the conference is making a social contribution to those who have felt cut off from academic institutions, research and studies by the coronavirus pandemic. By furthering our science knowledge and networks the conference contributes to development of the knowledge economy.

What is more pleasing with this conference is the fact that it will be giving students a chance to (i) present their research completed in 2020 and (ii) to network and learn from others, in a way that has not been possible for most of the year due to COVID-19.

Since 2010, the HPW has completed thirty-one (31) undergraduate workshops for over 1000 participants, trained several hundred students for leadership roles and assisted student leaders in delivering more than twenty (20) schools engagement programmes spanning all South African provinces.

I would like to take this opportunity to commend HPW student alumni and leaders for having organised this conference, which involves around 200 scientists and 100 new research presentations.

You have done a great job by showing leadership and initiative. I must say that your effort will go along away to change the manner in which science will be perceived by future generations because they will have an opportunity to experience an organised
science engagement platform that will help them to make informed career choices, particularly in the scientific space.

The conference organisers have also requested me to address this conference on the “Current relevance of doing science research and why is it important to be part of an organisation such as ACCESS”.

Students, particularly research students are the life-blood of research - they are the ones guided and assisted by supervisors, and actually make research progress and breakthrough by generating a new body of knowledge.

In order for South Africa to prosper, we need trained people - and the field of Earth Systems Science forms an important part of this training.

Off-course, physical, natural, and social sciences are all equally important areas where we need the skills and the students who will develop these skills and become leaders in their fields. Hence the importance of multidisciplinary approaches and methodologies as foundations of our research and scientific endeavours.

Without any fear of contradiction, I can assure all of you today that South Africa is an excellent place to be pursuing a research career because of many opportunities both within the NSI and beyond. We also have many research institutions and science councils in which students can pursue their careers and future job prospects.

What is also certain is that we also need to grow our research capacity beyond our current capacity – which is the role of programmes such as ACCESS.

This conference today is particularly important as it gives students a rare chance to exhibit their research in a year disrupted by COVID – 19. The event also gives exposure to the researchers work and motivation to those watching to consider pursuing research in the fields of interest.

Given the technological advances in the world and the advent of the Fourth Industrial Revolution (4IR), the world now recognises the importance of a modern graduate not just to have a degree but to have unique skills and experiences, including soft skills.

What also makes this conference relevant is the fact that it is taking place at a time of immense global and local upheaval, uncertainty and turbulence caused by the new fourfold crises of COVID-19; deepening economic crisis; the multiple crises of socio-economic sustainability for families, households and communities, and Climate Change, which is our focus today.

This is what the ACCESS programme is all about – conducting scientific research to solve concrete and practical problems, alongside personal development and the establishment of a network of emerging researchers who will become colleagues in the future.

You might also have taken note of the latest National List of Occupations in High Demand (OIHD) in South Africa which I publicly and recently announced.
The list reflects the work undertaken by the DHET, through the Labour Market Intelligence research programme, to support human resource development in our country.

In this list, we have identified 345 occupations that are in high demand out of a total of 1,500 registered in our Organising Framework for Occupations.

This list is updated every two years, and marks an important step towards helping us understand better the needs of the labour market and signals opportunities where our students and graduates are likely to stand a better chance of finding employment.

This list tells us which occupations are likely to have such vacancies and which occupations are likely to grow due to new investments, especially by government.

Many of the occupations on the list can be associated with key areas and sectors identified as crucial for the Reconstruction and Recovery Plan as announced by President Ramaphosa, such as the digital economy, energy, infrastructure development, manufacturing, tourism and agriculture, data scientists, web developer, computer network technician, electrical engineer, concentrated solar power process controller, mechatronic technician, toolmaker, gaming worker, crop produce analyst, agricultural scientist, just to name a few.

I must say that this event as organised by students, is an excellent example of the kind of initiatives we need which provides us with optimism about the future of scientific leadership in South Africa. This is help us to channel our training and skill effort to the areas which our economy needs most.

Ladies and gentlemen

This event provides an excellent platform for students and emerging researchers to engage in topical issues and share research results/outputs and experiences from a wide range of earth systems science related fields of study.

In so doing, new knowledge and science-based solutions are shared for potential applications by different role players.

I must indicate that basic research remains our core focus as the Department of Science and Innovation in our quest to advance knowledge generation, and supporting South Africa’s socio-economic development.

The increasing the number of PhD graduates are key elements of our National Development Plan (NDP) and science graduates will always play an important role in knowledge generation. Initiatives such as this are important in achieving the goals laid out in the NDP and in enhancing knowledge generation.

This speaks directly to several DSI priorities and in particular to deliver a “Function Climate Change Research Network” which is ACCESS’ responsibility to execute.
In conclusion, let me express my Ministry unwavering support of the Habitable Planet Workshop (HPW) Programme and the Alliance for Collaboration on Climate and Earth Systems Science (ACCESS) programme.

I take this opportunity to thank the organisers, participants and invited guests who will be making valuable input into this conference. I would be glad at the end of this conference to be presented with a report with implementable programmes that my Ministry could support going forward.

I will be pleased if this programme could be expanded to the other Historically Disadvantaged Institutions which have not as yet joined the network.

I wish you all the best in your presentations and engagements today. For those of you who will be celebrating Christmas, I wish you a merry Christmas and a prosperous new year to all. Remember, we are still under the COVID-19 lockdown alert level one. Let us all be responsible and keep all the protocols by wearing masks, keeping physical distance, avoid shaking hands and sanitising all the time.

I thank you