

BRICS ACADEMIES OF SCIENCES
BEIJING DECLARATION
ON
BIG DATA FOR SUSTAINABLE DEVELOPMENT

We, the Presidents of the Chinese Academy of Sciences, the Academy of Science of South Africa, the Brazilian Academy of Sciences, the Russian Academy of Sciences, and the Indian National Science Academy, (henceforth collectively referred to as “BRICS ACADEMIES”), met at the BRICS Forum on Big Data for Sustainable Development on April 26, 2022;

RECALLING commitments from all the BRICS countries on several occasions to support global initiatives, including the Sendai Framework for Disaster Risk Reduction, the Paris Agreement on Climate Change, and the 2030 Agenda for Sustainable Development;

REAFFIRMING the transformative potential of the UN Sustainable Development Goals (SDGs) to end global poverty, guide global development, protect health and safety of global citizens, and address global challenges in social, economic and environmental domains;

RECOGNIZING that science, technology and innovation (STI) are vital driving forces to tackle global challenges and achieve the SDGs, and the role that the BRICS ACADEMIES can play at regional and global levels to promote these ideals through the STI cooperation under the BRICS framework;

REALIZING the increasing importance of big data in stimulating the progress of science and technology in the information age, and the vital position of big data in digital transformation that requires a closer alignment of industry with science and the increasing government investment in STI;

REALIZING the contribution of big data to the evidence-based policymaking towards sustainable development, and the necessity of empowering scientists to be a valued partner in equal condition to other stakeholders when serving government with policy advice;

EMPHASIZING the importance of strengthening STI collaboration, in particular, the collaboration in facilitating access to shareable data, developing and sharing big data systems and infrastructures; and the significance of science as the overarching thrust towards open and Findable, Accessible, Interoperable, and Reusable (FAIR) data. This will be subject to adoption by the respective BRICS member countries in consonance with the existing policies;

COMMITTED TO:

1. Strengthening a comprehensive cooperation partnership on STI cooperation among the BRICS ACADEMIES, especially on big data for sustainable development through various forms of collaboration, including communication of scientific outcomes and ideas, researchers and students exchange and cultivation, particularly of young people;

2. Promoting the cooperation in big data and associated technologies for the following fields as priorities:
 - a. ***Agriculture, Food Security and Poverty Alleviation*** - acknowledge the potential of big data in understanding complex, multi-dimensional challenges related to food security and poverty alleviation;
 - b. ***Digital Economy*** - recognize the transformation that has come about through automation of markets and economies, and the potential of rapid social progress;
 - c. ***Sustainable Urban and Rural Development*** - ensure sustainable infrastructure, clean water and sanitation, as well as associated services for promoting rural and urban centers in BRICS countries and ensure mutual progress through cooperation between BRICS ACADEMIES;
 - d. ***Biodiversity Conservation*** - realize the role of big data in biodiversity conservation by combining multi-source big data to map and identify hot-spots issues and changes related to biodiversity, and vulnerable species;
 - e. ***Climate Actions and Disaster Reduction*** - acknowledge the potential of big data in monitoring and predicting environmental change, spatial distribution of disasters, and changing carbon budget;
3. Developing a full stack of open trusted and tested - technologies for big data analysis to facilitate the sustainable development of the BRICS countries, with sufficient attention and provisions for personal data preservation, protection, data privacy; and ethical aspects adhering to their respective legislations.
4. Calling on a wide range of collaboration among the science community in BRICS countries, to make joint effort to tackle common challenges, for example, health, climate change, food security and so on, and achieve the SDGs.



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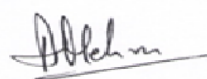
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