## **Preface**

In 2015, the United Nations adopted the 2030 Agenda for Sustainable Development, which includes 17 sustainable development goals (SDGs) to be achieved by 2030. The SDGs are about achieving economic, social and environmental sustainability on a global scale. Since the launch of the 2030 Agenda, China has worked to promote the SDGs while embracing a new philosophy of innovative, coordinated, green, open and shared development, achieving impressive results in eradicating absolute poverty, addressing climate change, improving ecological environment, promoting public health service and ensuring food security. Steady progress has been made in achieving high-quality development. At the same time, China has actively engaged in and promoted international development cooperation, and has provided reliable public goods for the realization of SDGs across the world.

The experience of the past six years, however, has shown that there remain a number of major challenges to scientifically evaluating the implementation of the 2030 Agenda, the most serious ones being the lack of data, the incompleteness of the indicator system, and the gap in capacity of having and using data as a result of development disparity. As China's national



scientific institute, the Chinese Academy of Sciences (CAS) has long been devoted to promoting SDGs through big data. In recent years, CAS has been working with universities, research institutes and enterprises at home and abroad to explore the application of combined new technologies such as cloud computing, artificial intelligence, space technology and network communication technology to improve the evaluation system for SDGs, develop public data products and inform decision-making.

Chinese President Xi Jinping announced on September 22, 2020, at the 75th session of the United Nations General Assembly, that China will establish an International Research Center of Big Data for Sustainable Development Goals (CBAS), to provide new impetus for the implementation of the 2030 Agenda. Subsequently, CBAS was officially launched in Beijing on September 6, 2021. President Xi Jinping sent a congratulatory letter, and United Nations Secretary-General António Guterres delivered a video message to congratulate on the establishment of the Center. I believe that CBAS will use big data to give support to the sustainable development of China and the world.

In recent years, CAS has, based on its advantages, done demonstration studies on monitoring and evaluation of indicators for the goals of Zero Hunger, Clean Water and Sanitation, Sustainable Cities and Communities, Climate Action, Life below Water and Life on Land, and issued annual reports on big earth data in support of the sustainable development goals. The 2021 report continues to focus on the practical scenarios for these SDGs' realization, and presents research results including single indicator progress evaluation and integrated multi-indicator evaluation. These results provide stronger scientific basis for understanding the dynamic trends of SDG indicators and analyzing the problems hindering sustainable development, and they can inform decision on SDG realization in different scales and regions.

2021 marks the 50th anniversary of the restoration of the People's Republic of China's lawful seat in the United Nations. This CAS report is part of China's sustained contribution in the form of science and technology to the implementation of the 2030 Agenda. CAS will further strengthen the collaborations with international counterparts to address new challenges to sustainable development through science, technology and innovation.

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