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# Environment Monitoring

Duan Fengkui



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# Preface

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Environment issue has become a complex issue involving many fields such as politics, economy, diplomacy, society, culture, science and technology with multiple dimensions. International negotiations on key environmental topics such as addressing climate change and conservation of biodiversity increasingly become the hot topic of foreign affairs and focus of interests of many countries in the world. This has something to do with deepening understanding of the international communities in the field of environment and development. In particular, there are four historic leaps of human understanding about eco environment issues. The first leap happened at the First United Nations Conference on the Human Environment in Stockholm, Sweden in June of 1972. This conference gives a warning to the whole world that there is "Only One Earth". The Declaration on the Human Development adopted by the conference stresses that "Man has constantly to sum up experience and go on discovering, inventing, creating and advancing." The second leap happened at the United Nations Conference in Environment and Development held in Rio de Janeiro, Brazil in June, 1992. This meeting for the first time considers economic development in the context of environmental protection, identifies the principle of "common but differentiated responsibilities" and puts forward sustainable development strategy. The third leap happened at the World Summit on Sustainable Development held in Johannesburg, South Africa in August of 2002. This meeting identifies that economic development, social progress and environmental protection are the three pillars for sustainable development. The fourth leap occurred at the United Nations Conference on Sustainable Development held in Rio de Janeiro, Brazil in June of 2012. Targeting the theme of "Build Green

Economy to Achieve Sustainable Development and Lift People out of Poverty" and "Institutional Framework for Sustainable Development", this conference has discussed and adopted the outcome document The Future We Want centering on the three objectives of "Securing renewed political commitment for sustainable development", "Assessing the progress and implementation gaps in meeting previous commitments" and "Addressing new and emerging challenges". It has decided to launch the process for achieving the objectives of sustainable development and help developing countries enhance their capacity in sustainable development.

The commencement, growth and development of environmental protection cause of China keep the same pace with that of the world. As the biggest developing country in the world, China makes active contributions to the four leaps in the field of global environment and development. In particular, the Central Committee of Communist Party of China and the State Council put forward a series of new concepts such as the development of ecological civilization, ecological restoration of rivers and lakes, promotion of historic transformations of environmental protection and exploration of new path to environmental protection that protects the environment in the process of development and development in the process of environmental protection; release many major policy measures since the beginning of the "11<sup>th</sup> Five-Year Plan" period to facilitate important changes of environmental protection from understanding to practice.

In view of the difficulties such as still prominent imbalanced, uncoordinated and unsustained development issue, inappropriate industrial structure, increasing resource and environment constraints and evidently more social contradictions in the development of our country, the 18<sup>th</sup> National Congress of Communist Party of China closed in mid November of 2012 for the first time integrates the development of ecological civilization into the five overall arrangements for the cause of socialism with Chinese characteristics. This is a key innovation of the Chinese Government in both concept and practice of development; a

strategic option complying with the new trend of green and low-carbon development of the world; and an effective approach to facilitate our economy and society following the path of comprehensive, coordinated, sustainable and scientific development. The development of ecological civilization is both a key development issue and an important welfare issue. It is conducive to the improvement of eco environment quality, promotion of social harmony and stability and enhancement of sustainable development capacity. We must establish the idea of ecological civilization that respects, complies with and protects nature; put the development of ecological civilization at prominent position, and incorporate it into all aspects and whole process of economic, political, cultural and social development; strive for developing beautiful China, march toward new era of socialist ecological civilization, achieve sustainable development of the Chinese nation and make contributions to global ecological safety.

The Chinese Government firmly adheres to the independent foreign policy of peace, unswervingly follows the path of peaceful development and strives for developing a harmonious world of lasting peace and common prosperity. In international environment cooperation and exchanges, China firmly adheres to the principles of common but differentiated responsibilities, equity and respective capability; proactively lends a helping hand to developing countries, shoulders the obligations and responsibility for foreign aid within our capacity, actively strengthens the unity and cooperation with developing countries, jointly safeguards legitimate rights and interests of developing countries, supports stronger representation and voice of developing countries in international affairs, and will always be a reliable friend and sincere partner of developing countries.

With the Green Envoy Program of China South — South Environment Cooperation, Ministry of Environmental Protection has organized a range of environmental protection training courses for environmental officials and professionals of developing countries over the past few years with participants from the countries of regions like

Africa, West Asia, Oceania, Southeast Asia, Central Asia and Latin America, which have facilitated bilateral and multilateral environmental cooperation; strengthened friendship and mutual understanding and obtained good achievement. To better standardize the management of international environmental training and exchange activities in the future, Ministry of Environmental Protection has organized relevant experts to compile a series of books for environmental training under the Green Envoy Program of China South—South Environmental Cooperation. This series include six books that systematically summarize typical policies, laws and regulations, management skills and professional expertise in environmental protection field of China. With both professional theory and analysis on practical cases, this series of books fill the gap of the textbooks for training overseas participants in the field of environmental protection.

I believe that the publication of this series of books will showcase and publicize new concepts and successful practice of environmental protection of our country, especially important role in publicizing successful experience of our country in the development of ecological civilization and beautiful China.

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