Science in China

JIANG ZEMIN Authors Info & Affiliations

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An historic, unprecedented transition is unfolding in present-day China. We face pressing imperatives—the restructuring of the national economy, the rational use of our resources, the protection of our environment, the coordinated economic development of different regions, the alleviation of poverty, and the raising of living and ethical and cultural standards across our diverse country—all of which produce an urgent need for the development of science and technology. The outgoing century has witnessed a blossoming of science and technology in the world. Relativity, quantum mechanics, molecular biology, and information theory all arose in the 20th century, which is a testimony to the strength of the scientific method in the continual advancement of knowledge. These scientific breakthroughs form the foundation on which modern civilization builds, and they promise a future replete with material prosperity and intellectual enrichment worldwide. For these reasons, I believe that science and technology should be the driving force for China's rejuvenation and sustainable development.

China has a long history of science and civilization. It was the decadent feudal system and the aggression of the imperial powers that plunged China deep into backwardness and humiliation in modern times. Since the founding of the People's Republic of China, however, Chinese scientists and engineers have begun to solve the numerous problems that once stunted the development of our society. China has succeeded in meeting the basic needs of more than 1.2 billion people. Now scientists are playing a major role in our economic reform and social transformation. It is in this vein that we are encouraging scientists to conduct basic research in fields where the needs of the state intersect the frontiers of science, and we applaud those who are driven by curiosity to pursue pure research. We recognize and respect the unique sensitivities and sensibilities of scientists; we understand that scientific creativity is the very source and lifeline of a knowledge-based economy. Accordingly, the Chinese government is committed to establishing a favorable environment in which scientific creativity flourishes along with innovative commercialization, and in which management reform is a must. Upgrading the scientific literacy of all Chinese citizens is also essential: A high-caliber scientific community supported by an increasingly astute workforce is China's engine for change, ensuring our continuing modernization and preparing the nation to embrace the world and the future. Thus, scientific research and education are both national priorities and are incorporated into all of China's development strategies.

Because China is a developing country with a limited science budget, we are focusing on areas of critical need that do not demand large capital expenditures, such as the improvement of crops (facilitated, in the case of rice, for example, by the sequencing of its genome) and livestock through genetic modification; the development of information technology and artificial intelligence; and such disciplines as ecology, mathematics, neuroscience, condensed-matter physics, and geology. Nevertheless, we are also outward-looking. It has been a long-standing policy to encourage Chinese scientists to take part in selected international projects. For two decades, cooperation between Chinese and U.S. scientists has benefited both countries. There has been extensive collaboration in high-energy physics, seismology, paleontology, oceanography, natural disaster prevention, the development of water resources, environmental protection, public health, the preservation of biodiversity, and areas pertaining to sustainable development.

At present, the process of China's entry into the World Trade Organization has been accelerated. And a progressively more open China will increasingly shoulder its share of responsibility in matters of international concern. In issues such as desertification control, global climate change, and biodiversity preservation, China is now an active participant. By seeking common ground and common interests, I firmly believe that international scientific exchange and cooperation can transcend any differences in social systems, economic models, cultural traditions, and levels of development.

The advancement of science in China is essential not only for China's welfare but also for that of the whole world. Chinese scientists look forward to joining with their counterparts in other countries in contributing to humankind's common cause. It is our solemn commitment that China's scientific development shall benefit all peoples.