

NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY BUILDING - CHINA

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Keywords: National policy mechanisms, Investment orientation, legislation of environment and resources, stabilization of rural land utilization system, knowledge-based economy, China's Action on Climate Changes Plan, Convention of Desertification, China's Action Program on Bio-diversity protection, Hygiene and Health, occupational disease, poisoning accidents, contagious diseases, iodine deficiency, Sustainable Development Impact Assessment(SDIA), water shortage, groundwater funnel, eutrophication, seawater invasion, water-saving irrigation, Solid waste sound management, radioactive waste, regenerated resources.

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1. National policy mechanisms for capacity building

The Reform and Opening Policy provides equal opportunities for all people and enterprises taking part in competition. The policy of starting to select governmental staff/officials in an open way ensures official quality and ultimately strengthens leadership. Public participation in audition and administration can effectively prevent corruption. Training and refreshing education are carried out.

More investment is to be input to education, technology transfer, making implementation of the policy to benefit China through science and education. High-tech development is encouraged by carrying out a series of policies.

There are several key projects for capacity building in the IT industry (Information Technology), S&T Innovation Project, "863"Project, the Spark program, the Torch Program, Anti-Illiteracy Campaign.

The Chinese government pays great attention to problems of resources, environment

and development. In 1992, Premier Li Peng attended the UN Conference on Environment and Development in Rio de Janeiro and delivered an important speech, representing a promise by the Chinese government to carry out international commitments and decisions for implementation of a sustainable development strategy in China. Later, the government decided to formulate “China’s Agenda 21”, led and organized by the State Planning Committee (later renamed the State Committee of Economic Development) and the State Commission of Science and Technology (now the State Science and Technology Ministry). With support from UNDP, the text of “China’s Agenda 21” was finally completed through the efforts of more than 300 experts from 52 departments. In 1995, the State Council, passed “China’s Agenda 21”, and made it as “China’s White Paper on Population, Environment and Development in the Twenty-First century”, being the overall strategic document for future development of China and guiding process of development for the whole society. The completion of “China’s Agenda 21” not only has deep influence on China’s socio-economic development, but also supports realization of worldwide sustainable development. Formulation and implementation of “China’s Agenda 21”, and taking the road of sustainable development are China’s own requirements and irrevocable choice. We should recognize that the traditional development path of pursuing economic quantity through high consumption, and “first pollution, later management” is no longer suited to China’s requirements. The state has put forward a sustainable development strategy, making efforts in seeking a sustainable development road, involving coordination of population, economy, society, environment and natural resources. China is a nation with a 1.2 billion population and net annual growth of 14 million people, and the country has many pressing tasks of developing economy, getting rid of poverty, raising people’s living standards and improving living quality. China is realizing its economic growth under conditions of very high population, low per capita resources, and a comparatively backward levels of economy, science and technology, so that natural resources, in a fragile environment, are facing even more pressure. The government can only follow the strategic concept of sustainable development, maximizing coordination and organization between various departments, regions, and social strata. Without this it will be impossible to fulfill economic development targets, and simultaneously protect natural resources and improve the ecological environment.

The Chinese government undertakes international responsibilities and commitments corresponding to China’s developing level, for implementation of “China’s Agenda 21” and “China’s White Paper on Population, Environment and Development in the Twenty-first Century”. At a time when Chinese people are making great efforts in realization of sustainable development through coordination among population, economy, society, environment and resources, China is also willing to carry out effective bilateral and multi-lateral collaboration with countries and regions all over world in implementing “China’s Agenda 21”.

The state has examined the need for legislation on environment and resources and has greatly strengthened the laws. New domestic legislation has facilitated China’s accession to international conventions in the field of global sustainable development, e.g. on ozone depleting substances.

China has carried out large-scale management of national territory, protecting farmland,

forest, grassland, wetland, water resources, biodiversity, domesticated animals and crops. As a basis of formulation and implementation of farmland protection regulations, approximately 80% of China's farmland has been divided into farmland protection areas. Arrangements for low-yield and middle-yield farmland have been reformed, requiring separate planning and management, and the structure of high-yield and stable-yield farmland has been strengthened. Land reclamation is promoted, wind-erosion and water-erosion of farmland has been minimized (by farmland protection forest belts and land leveling and water conservation respectively). As part of the stabilization of the rural land utilization system, rural households are encouraged to return crops stalks back to the land and to use organic fertilizer.

China has created forest belts in Northeast, North, and Northwest China, and more than 600 nature reserves, with an area totaled 400 000 km². The area of forest belts in Northeast China, North China, Northwest China has reached 21.77 million ha, and the soil-erosion management area in the Yellow River watershed has reached 4.5 million ha. Between 2001 and 2010, the construction area of forest belts in Northeast China, North China, Northwest China is planned to reach 13.33 million ha, and the soil-erosion management area in Yellow River watershed 7.5 million ha.

China has also constructed a forest belt system in the middle and upper reaches of Yangtze River, totaling 6.66 million ha, and the soil-erosion management area in Yangtze River watershed is 5.6 million ha. By 2010, the forest belt system in middle and upper reaches of Yangtze River should be 13.33 million ha, and soil-erosion management area in Yangtze River watershed should extend to 9 million ha. The soil-erosion management area in Song-Liao River watershed is 3 million ha, and by 2010, it should be 5 million ha. China is carrying out the Taihangshan greening project in North China and a soil-erosion management project in Haihe River watershed. Afforestation in Taihangshan is 2.71 million ha, and the soil-erosion management area in Haihe River watershed is due to reach 2.2 million ha by 2010. In the Huaihe River watershed the soil-erosion management area is scheduled to be 2.2 million ha by 2010, and the area of protection forest belt system is 1.05 million ha. China is also carrying out an integrated protection forest belt system in Zhujiang River watershed in South China, (currently 1.2 million ha), soil-erosion management in Zhujiang River watershed (1.1 million and due to reach 1.9 million ha by 2010). China is carrying out a coastal protection forest system project, which should increase the current 2.46 million ha to 1.08 million ha by 2010.

In view of the large population, limited funds and technical level, and severe environmental problems, e.g. land degradation, desertification, soil-erosion, deterioration of water quality, shortage in water resources, drought and flood disasters, degradation of forest and urban and rural environment pollution, China is seeking effective multiple and bilateral co-operations with countries and regions all over world. China is deepening its reform and further expanding the opening policies; economic development is fast and market potentials are great, creating good environment for collaboration between the international community and China.

After flooding in the Songhuajiang and Yangtze River in 1998, based on instructions of president Jiang Zemin and premier Zhu Rongji, the government formulated "National

Ecological Environment Construction Planning”. Proposals were split into short term, middle term and long term (ten, twenty and fifty years respectively), taking construction of the ecological environment to unprecedented heights.

China’s environmental problems are part of the global environmental problems. China deeply understands its responsibilities and the actions that need to be taken in protecting the ecological environment of the earth. It pays great attention to and takes an active part in UN-sponsored discussions on environment and development, and has signed multiple international conventions and agreements. In 1991, China sponsored a “Developing Countries’ Ministersial Conference on Environment and Development”, and issued the “Beijing Announcement”—an active contribution by China and other developing countries in promoting world environment and development.

China has taken construction of ecological environment to unprecedented heights. This creates conditions for international collaboration in various forms—China is the largest developing country in the world, its population ranks first in the world (being greater than all developed countries in the world). China’s ecological restoration is itself a great contribution to the world in protecting the common homeland of humankind, and companies specializing in environmental protection in developed countries can also find market opportunities in China. For more than three hundred years, developed countries have over-consumed natural resources and discharged huge quantities of pollutants in the process of industrialization, creating much of today’s global environmental deterioration. Even today developed nations are still far above developing nations both in terms of total and per capita resource consumption and pollutant discharge. At the same time, developing nations have more solid economic strength and more advanced technology in environmental protection, and they should accept their obligations in solving global environmental problems. Developed nations should provide extra-funds and transfer environmental protection technology in preferential conditions for developing nations, to help them to improve their environment and participate in global environmental protection. These practices are not only favorable for developing nations, but also sensible in with regard to benefits for developed nations themselves.

Developed nations, particularly USA have entered the information society. Dominated by knowledge-based economy, the post-industrial society is characterized by sustainable development technologies, such as new energy technology, material technology, and biotechnology. Developed nations have great potentials in supporting developing nations that are still in a comparatively backward stage of social development. World peace and stabilization cannot be separated from global environmental protection and development. If the differences between the North and the South are still growing it is inevitable that there will be extremely unfavorable impacts on the future of the global environment and the whole of humanity.

2. Climate Change Convention

After the premier of the State Council, on behalf of the Chinese government, signed the “Climate Change Convention” in September 1992, the State Council set up the “National Coordination Group on Climate Change”. In November 1998, the State Development and Planning Committee set up the “National Countermeasure

Coordination Group on Climate Changes”, and “China’s Agenda 21 Meteorological Action Plan” was formulated. China established a global atmospheric baseline observation station, and an atmospheric ozone monitoring network. The State Ministry of Science and Technology, State Committee of Natural Science Foundation, Chinese Academy of Sciences, and State Meteorological Bureau carried out the following programs related to climate change:

- Studies on climate dynamics and climate predication theories;
- Studies on global climate change prediction, impacts and countermeasures;
- Studies on disastrous climate prediction and its impacts on agricultural yield and distribution of water resources;
- Studies on droughts and floods in the Yangtze River watershed and the Yellow river watershed, as well as their predication;
- Global changes, China’s environment changes and future development trends;
- Atmospheric ozone change within China’s territory and impacts on climate change, and
- China’s methane discharge from rice-fields.

In 1998, Chinese scientists carried out five large-scale field comprehensive tests and observations:

- South China Sea test on monsoons;
- Scientific experiment and research on physical processes of ground-atmosphere system on Qinghai-Tibet Plateau and its impacts on global and national climate;
- Energy and water circulation test in the Huaihe River watershed;
- South China torrential rain test, and
- Soil-vegetation- atmosphere interaction in semi-arid grassland of Inner-Mongolia Autonomous Region

China also takes an active part in and progressing important international collaboration and exchanges related to implementation of conventions, for example pushing forward the signing of the “United Nations Framework Convention on Climate Change”, taking an active part in the work of the Intergovernmental Panel on Climate Changes (IPCC), and setting up China’s Committee for the Global Climate Observation System.

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Biographical Sketch

Yaxin Zheng (male) is an associate professor in the Commission for Integrated Survey of Natural Resources (CISNAR), Chinese Academy of Sciences (CAS). His research interests include geochemistry and sustainable development. His research experience is as follows:

1. Geothermal Survey in Hengduan Mountains, eastern extension of Qinghai-Xizang (Tibet) plateau, south-west China, i.e. west Yunnan Province and Sichuan Province, 1983-1985.
2. Project of Resources Development expedition to south-west China, in charge of energy planning sub-project, 1986-1988.
3. Project of Tibet "One River and Two Tributaries (middle reach of Yarlung Zangbo river and middle and lower reaches of Lhasa river and Nyangqu river)", 1989-1990.
4. Project of Sustainable Development Overall Planning of Wuyishan Biosphere Reserve, 1991 - 1992.
5. Project of Sven Hedin's natural heritage in Tibet, preparatory stage of collecting materials in the National Museum of Ethnography, Stockholm, August to October 1993.
6. World Bank Poverty Alleviation project in South-west China, 1994-1995.
7. Project of Sino-Swedish cooperation project on Sven Hedin's natural heritage in Tibet, fieldwork stage, September to October 1995.
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