

# JOHANNESBURG SUMMIT 2002

CHINA



COUNTRY PROFILE



UNITED NATIONS

## **INTRODUCTION - 2002 COUNTRY PROFILES SERIES**

Agenda 21, adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, underscored the important role that States play in the implementation of the Agenda at the national level. It recommended that States consider preparing national reports and communicating the information therein to the Commission on Sustainable Development (CSD) including, activities they undertake to implement Agenda 21, the obstacles and challenges they confront, and other environment and development issues they find relevant.

As a result, in 1993 governments began preparing national reports for submission to the CSD. After two years of following this practice, the CSD decided that a summarized version of national reports submitted thus far would be useful. Subsequently, the CSD Secretariat published the first Country Profiles series in 1997 on the occasion of the five-year review of the Earth Summit (Rio + 5). The series summarized, on a country-by-country basis, all the national reports submitted between 1994 and 1996. Each Profile covered the status of all Agenda 21 chapters.

The purpose of Country Profiles is to:

- Help countries monitor their own progress;
- Share experiences and information with others; and,
- Serve as institutional memory to track and record national actions undertaken to implement Agenda 21.

A second series of Country Profiles is being published on the occasion of the World Summit on Sustainable Development being held in Johannesburg from August 26 to September 4, 2002. Each profile covers all 40 chapters of Agenda 21, as well as those issues that have been separately addressed by the CSD since 1997, including trade, energy, transport, sustainable tourism and industry.

The 2002 Country Profiles series provides the most comprehensive overview to date of the status of implementation of Agenda 21 at the national level. Each Country Profile is based on information updated from that contained in the national reports submitted annually by governments.

Preparing national reports is often a challenging exercise. It can also be a productive and rewarding one in terms of taking stock of what has been achieved and by increasing communication, coordination and cooperation among a range of national agencies, institutions and groups. Hopefully, the information contained in this series of Country Profiles will serve as a useful tool for learning from the experience and knowledge gained by each country in its pursuit of sustainable development.

## NOTE TO READERS

The 2002 Country Profiles Series provides information on the implementation of Agenda 21 on a country-by-country and chapter-by-chapter basis (with the exception of chapters 1 and 23, which are preambles). Since Rio 1992, the Commission on Sustainable Development has specifically addressed other topics not included as separate chapters in Agenda 21. These issues of trade, industry, energy, transport and sustainable tourism are, therefore, treated as distinct sections in the Country Profiles. In instances where several Agenda 21 chapters are closely related, for example, chapters 20 to 22 which cover environmentally sound management of hazardous, solid and radioactive wastes, and chapters 24 to 32 which refer to strengthening of major groups, the information appears under a single heading in the Country Profile Series. Lastly, chapters 16 and 34, which deal with environmentally sound management of biotechnology, and transfer of environmentally sound technology, cooperation, capacity-building respectively, are presented together under one heading in those Country Profiles where information is relatively scarce.

*At the release of this Country Profile, China had not updated it and, therefore, any future changes will appear on our web page: <http://www.un.org/esa/agenda21/natlinfo>*

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## LIST OF COMMONLY USED ACRONYMS

ACS	Association of Caribbean States
AMCEN	Africa Ministerial Conference on the Environment
AMU	Arab Maghreb Union
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CARICOM	The Caribbean Community and Common Market
CBD	Convention on Biological Diversity
CIS	Commonwealth of Independent States
CGIAR	Consultative Group on International Agricultural Research
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMESA	Common Market for Eastern and Southern Africa
CSD	Commission on Sustainable Development of the United Nations
DESA	Department for Economic and Social Affairs
ECA	Economic Commission for Africa
ECCAS	Economic Community for Central African States
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FIDA	Foundation for International Development Assistance
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GHG	Greenhouse Gas
GIS	Geographical Information Systems
GLOBE	Global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWV)
GRID	Global Resource Information Database
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IAEA	International Atomic Energy Agency
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
ICT	Information and Communication Technology
ICTSD	International Centre for Trade and Sustainable Development
IEEA	Integrated Environmental and Economic Accounting
IFAD	International Fund for Agricultural Development
IFCS	Intergovernmental Forum on Chemical Safety
IGADD	Intergovernmental Authority on Drought and Development
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization

IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	Integrated Pest Management
IRPTC	International Register of Potentially Toxic Chemicals
ISDR	International Strategy for Disaster Reduction
ISO	International Organization for Standardization
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature and Natural Resources
LA21	Local Agenda 21
LDCs	Least Developed Countries
MARPOL	International Convention for the Prevention of Pollution from Ships
MEAs	Multilateral Environmental Agreements
NEAP	National Environmental Action Plan
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organizations
NSDS	National Sustainable Development Strategies
OAS	Organization of American States
OAU	Organization for African Unity
ODA	Official Development Assistance/Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnership
PRSP	Poverty Reduction Strategy Papers
SACEP	South Asian Cooperative Environment Programme
SADC	Southern African Development Community
SARD	Sustainable Agriculture and Rural Development
SIDS	Small Island Developing States
SPREP	South Pacific Regional Environment Programme
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNCED	United Nations Conference on Environment and Development
UNCCD	United Nations Convention to Combat Desertification
UNCHS	United Nations Centre for Human Settlements (Habitat)
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNIFEM	United Nations Development Fund for Women
UNU	United Nations University
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

WWF  
WWW

World Wildlife Fund  
World Weather Watch (WMO)

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## **CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES**

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** China is committed to participating in international organizations and strengthening international cooperation. China is committed to taking an active part in global environmental protection activities.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** Proceeding from the spirit of establishing global partnerships, international co-operation has been actively sought in the realm of environment and development. Supported by relevant agencies of the United Nations, international organisations, the governments of many other nations, and the business community, the Chinese Government held the First and Second International High-Level Round Table Conferences on China's Agenda 21 in 1994 and 1996 respectively. These two conferences helped promote the exchange of experience and gave new impetus to international co-operation in the field of sustainable development.

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## **CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES - TRADE**

**Decision-Making:** The ultimate target of economic restructuring is the establishment of a socialist market economy by the end of this century, through, *inter alia*, the development of markets, a modern enterprise system, and comprehensive reforms of the financial, tax, banking, investment and planning systems.

In order to promote international cooperation on China's Agenda 21 and establish cooperative partnerships on global environment and development, the Chinese Government has formulated the Priority Programme for China's Agenda 21. The Priority Programme includes 82 projects covering the following 9 priority areas: 1) capacity building for sustainable development; 2) sustainable agriculture; 3) cleaner production and environmental protection industry; 4) clean energy and transportation; 5) conservation and sustainable utilization of natural resources; 6) environmental pollution control; 7) poverty alleviation and regional development; 8) population, health, and human settlements; and 9) global climate change and biodiversity conservation.

**Programmes and Projects:** No information available.

**Status:** China is committed to participating in international organisations and strengthening international cooperation. China encourages the establishment of an international trade regime that is fair, stable, non-discriminatory, predictable and takes into account the interests of developing nations. China is committed to taking an active part in global environmental protection activities. Since 1978, China has been experiencing a period of fundamental economic restructuring, involving a gradual transition from a planned economy to a socialist market economy. The Chinese economy has been gradually integrating itself into the global economic system. Dramatic changes have been undertaken in the following: 1) the structure of ownership through the introduction of individual, private and foreign capital ownership; 2) income distribution; 3) economic operations through the combination of planning and market mechanisms; 4) the decentralisation of decision-making.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## CHAPTER 3: COMBATING POVERTY

**Decision-Making:** The State Council Leading Group Office of Poverty Alleviation and Development is the main governmental organisation responsible for the issues related to poverty alleviation. An Office of Poverty Alleviation and Development in Poverty-stricken Areas was also established.

The officials and the public in poor regions, with the support of the Government, are encouraged to alleviate poverty through self-reliance, hard work, scientific and technological progress, market-oriented production, developing and utilising local resources, increasing commodity production, and solving the supply problems of food and clothing. According to the national poverty alleviation plan, called the Helping Eighty Million People in Seven Years Plan, the State will do all it can to solve the problems of inadequate food and clothing for the 80 million poverty-stricken rural people in a seven year period from 1994 to 2000. This will be accomplished by concentrating the manpower, material and financial resources of the country and mobilising all forces of society. The various State departments started scores of departmental or sectoral plans for promoting development in poor regions, such as Poverty Alleviation through Transportation, Drinking Water for Both Humans and Livestock, and Common Prosperity through Development of the Electric Structure.

Major Groups, such as Chinese Women's Organisations, Youth Organisations, Labour Unions, etc. have played a very important role in alleviating poverty in China.

**Programmes and Projects:** Early in 1995, the State initiated the Projects for Cooperation between the Township Enterprises in East and West China with the aim to encourage the development of township and village enterprises in the poor central and western parts of the country and to promote growth of the rural economy. One hundred pilot areas for TVE cooperation will be set up in central and western China by the year 2000, with 1000 industrial pilot projects started, 1000 mature new technologies and products disseminated, and 100 sister counties (cities) of bilateral cooperation matched, in order to utilise regional advantages between the eastern and western regions, promote common prosperity, and narrow the regional disparity. In 1996, the State Council drew up a poverty-alleviation programme which required that six provinces and three municipalities directly under central administration, and four cities of independent economic planning along the coast help ten provinces and autonomous regions in the west. This programme has proceeded smoothly.

**Status:** After three years of hard work, China's poverty-stricken population had dropped from 80 to 58 million by the end of 1996. In 1995, the net annual per capita income for those counties listed as major alleviation targets by the State had reached RMB 824 yuan and the available per capita grain allocation reached 353.5 kg. At present, 122 central party departments, State departments, large-scale enterprises, and institutions have established relationships of designated assistance with 330 key poor counties (these account for 56% of the poor counties in the country). In 1995 alone, the above-listed work units made investments worth RMB 947 million yuan in materials and capital and introduced investment worth RMB 990 million yuan into the recipient counties. In the early 1990s, the Chinese Government declared that it would work to solve the problems of food and clothing supplies for these 80 million poverty-stricken people by the year 2000 and thus enable poor regions to embark on the path of sustainable development early in the next century. The Government has organised voluntary resettlement for those who are willing to leave those hometowns which are poor in natural conditions and resources. By moving out of these towns, nearly one million people have managed to find better food and clothing supplies. For example over 600,000 people have moved out of the desolate areas in the poorest regions of Dingxi Prefecture of Gansu Province and Xi-Hai-Gu Region of the Ningxia Hui Autonomous Region. By 1995, poor counties, with major governmental support, had expanded the acreage of their basic farmland by 269,000 hectares. Also, drinking water was newly channeled to 7.56 million people and 6.09 million livestock. More than 30,000 kilometres of new highways had been constructed, so that 98.3% of the towns in the countryside are now connected by highways, more than 31,000 kilometres of electric transmission lines had been constructed (88.4% of the villages were powered by the grid network), and there were substantial improvements in cultural life, education, and sanitary conditions in the poor regions.

**Capacity-building, Education, Training and Awareness-Raising:** In the implementation of the Spark Programme, the Food and Clothing Project was started in order to strengthen the technical training of the poverty-stricken population. Its objective is that each poor household will be able to apply one or two technologies. In 1995, this type of training was offered to 15 million people, thus broadly disseminating the

applicable farming techniques and technologies, pushing ahead the Food and Clothing Project on alleviating poverty through science and technology, and improving the practices of farmers in a continuous fashion. Under the Food and Clothing Project, the 1995 grain yield registered an average increase of 2,385 kg per hectare on the 630,606 hectares of arable land in the poor regions. This project managed to provide adequate food and clothing to approximately 10 million poor people that year.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** In 1995, RMB 9.85 billion yuan from the central Government and RMB 2.1 billion yuan from local governments were invested in poverty alleviation. In addition, in 1994 and 1995 the central Government transferred part of the credit fund originally allocated to six provinces with faster economic development to the poorest regions in the southwest and northeast. In 1996, the central Government appropriated RMB 10.8 billion yuan as a special poverty alleviation fund.

**Cooperation:** The World Bank has provided a US\$ 250 million loan to the first phase of the Southwestern China Poverty Alleviation Project. This project has been fully implemented in 35 key poor counties in Guizhou, Yunnan, and Guangxi Provinces. After the completion of the project, 3.5 million people will enjoy stable food and clothing supplies. The preparatory work for implementing the second phase of the poverty alleviation project has almost been completed. The next phase of the project, once again sponsored by the World Bank, will take place in the mountainous areas of Shaanxi and Sichuan in early 1997. Other projects of resource development are being carried out with support from the UNDP and various NGOs. Smooth progress has been recorded in a project for improving basic education in the poor areas. This project is being implemented by the State Education Commission and financed by a US\$ 320 million loan from the World Bank.

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## CHAPTER 4: CHANGING COMSUMPTION PATTERNS

**Decision-Making:** The Population, Consumption and Social Services section of China's Agenda 21 contains the programme area Establishment of Sustainable Consumption Patterns.

**Programmes and Projects:** No information available.

**Status:** Consumption trends in China are not always appropriate, but, on the whole, consumption by the Chinese people is still at a low level.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## **CHAPTER 4: CHANGING CONSUMPTION PATTERNS - ENERGY**

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## **CHAPTER 4: CHANGING CONSUMPTION PATTERNS - TRANSPORT**

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

**Decision-Making:** Family Planning Commissions were established at different levels and they have the major responsibility for population issues in China. In order to solve the problems caused by an aging population, the Chinese Government is accelerating establishment of an endowment and medical insurance system for elderly people which is characterised by social provision, support from their children, self-reliance, and mutual supplement. Meanwhile, laws have been formulated and promulgated to foster the social custom of respecting older people. Services of many kinds are rendered to seniors, including the establishment of senior-aid institutions, such as elderly community service networks and apartments for the elderly. The Law of the People's Republic of China Concerning the Guarantee of the Rights and Interests of Women has been put into effect so as to safeguard the legitimate rights and interests of women in education, employment, social participation, marriage, and family matters.

Family planning is an important strategic task for realising sustainable development. As early as 1982, the Chinese Government put family planning, population control, and improvement in the quality of lifestyle in its basic state policy and included these in the long-term plans for national economic and social development. In the 1990s, especially since the UNCED, the Chinese Government has, based on China's national conditions, constantly improved policies and plans on family planning, adopted integrated approaches for addressing population issues, and made great efforts to reduce the birth rate. Meanwhile, family planning was combined with development, poverty alleviation, educational promotion, women's status elevation, woman and infant medical care, social security development, rational development and utilisation of resources, and harmonious family establishment. The Government also offers guidance and services to families, especially poor families who are willing to follow the family planning programmes, in order to develop and improve production, increase income, and improve living standards.

**Programmes and Projects:** No information available.

**Status:** China's population reached 1.224 billion at the end of 1996 (not including the populations of Macao, Hong Kong, and Taiwan). This huge population, although constituting a gigantic manpower supply for sustainable social and economic development, exerts a heavy pressure on resources and the environment. China faces its third baby boom in the 1990s. It is estimated that the population will grow to 1.3 billion by the year 2000 and to 1.5-1.6 billion by the middle of the next century. Therefore, controlling population growth and improving the standards of living are important strategic tasks for China's sustainable development. In 1996, the national human fertility was 1.698%, a reduction of 0.408% compared with 2.106% in 1990. The natural population growth rate was 1.042% in 1996, a reduction of 0.397% compared with 1.439% in 1990. The total fertility rate of child-bearing age women has dropped to two. According to data from the United Nations, China's fertility is noticeably lower than the average of other developing countries. In 1995, the average Chinese urban female adult enjoyed an average of 9.97 years of schooling. Their illiteracy and semi-literacy rate was only 2.07%. Among the women living in rural areas, 8.91% have a high school education, 26.62% have attended middle-school, and 27.91% have only attended primary school. The illiteracy and semi-literacy rate for rural women is 36.58%.

Educational activities are carried out throughout the country on such topics as contraception, sterilisation, good bearing and upbringing, and reproductive care. Efforts have been made to improve the quality of reproductive medical services. Demonstrations on offering high-quality family planning service have been performed in some regions so that people of child-bearing age may choose contraception or sterilisation measures on an informed basis and in a responsible manner. By 1996, more than 200 million child-bearing age people had taken contraception measures. The integrated contraception rate among married women is more than 80%.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.



**Financing:** No information available.

**Cooperation:** No information available.

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## CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

**Decision-Making:** The Ministry of Public Health is the governmental agency responsible for issues related to human health. The Chinese Government pays great attention to the people's rights of reproduction and their reproductive health, and has worked to safeguard the legitimate rights and interests of women and children through legislation. In order to improve urban residents' health, a medical service and family planning network has been developed in China. In 1991, China began to reform its medical insurance system for urban workers by combining social management with individual accounting. At the same time, a cooperative medical system has been developed.

**Programmes and Projects:** No information available.

**Status:** At present, the average life expectancy of Chinese people is 70 years, the infant mortality rate has dropped below 3.14%, the pregnant and postpartum women mortality rate is 0.0619%, and the planned children vaccination rate is 85% (using towns as the statistical unit). All the above statistics serve to illustrate that some major indices of people's sanitation and health of China are advanced in comparison to other countries at a similar economic development level.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

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## CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

**Decision-Making:** The Ministry of Construction is the governmental agency responsible for sustainable development of human settlements. China has published and enforced the Law of the People's Republic of China on Municipal Planning, the Administrative Law of the People's Republic of China Concerning Urban Real Estate, the Regulations Governing the Developmental Planning for Villages and Towns, the Regulations on Water Supply in Cities, the Regulations Governing the Appearance and General Sanitation of Cities, the Regulations on Afforestation in Urban Areas, and the Regulations Governing Roads in Urban Areas, so that urban and rural planning, construction, and management systems are regulated by legal mechanisms and the development of urban and rural settlements is ensured.

By the end of 1996, 666 cities and 17,770 towns had drawn up overall municipal or township plans. These plans incorporated items such as protection and improvement of the urban ecological environment, use of land resources in an economic and rational way, and prevention and control of urban pollution. As stated in these plans, the reconstruction of the old quarters and the development of new districts in the cities must be done in line with the requirements that define the functions of certain city quarters. Also included are designs for adjusting the industrial layout, strengthening the prevention and control of industrial pollution, changing the location of factories adjacent to residential buildings, and controlling the urban environment hazards in both industrial production and living consumption. The aim of these plans is the creation of residential districts with reasonable layouts and a complete range of social services.

**Programmes and Projects:** Starting in 1994, the State Science and Technology Commission, the Ministry of Construction, and other state departments have jointly organised and implemented the Industrial Project of Science and Technology for 'Well-Off' Urban Housing to the Year 2000. The project is designed to accelerate the modernisation of China's housing construction industry by promoting the transfer and application of achievements in housing technology research, improving the functions and quality of buildings, and bettering the housing environment. In parallel with the overall development of scientific and technological research, a series of comprehensive demonstration projects on well-off housing have also been established.

Since 1989, the quantitative examination system for comprehensive urban environmental control has been advocated nation-wide by the Chinese Government. The central and provincial governments have performed quantitative checks in over 37 key cities and another 330 cities. By 1996, China had delineated an area of 14,085 square kilometres for smoke control and an area of 2,185 square kilometres for noise control. Several rivers that cut through cities have undergone large-scale overall re-embankment and dredging in order to improve the aquatic environment of the urban areas, e.g., Zhongdong River in Hangzhou, Funan River in Chengdu, Haihe River in Tianjin, Suzhou River in Shanghai, Qinhuai River in Nanjing, and Haohe River in Nantong. On the basis of this examination system, the Chinese Government established a number of model cities for environmental protection, such as Zhangjiagang in Jiangsu Province which became a model city in July of 1996.

**Status:** From 1990 to 1996, China accelerated its urbanisation process. In 1990, the size of the urban population was 301.91 million, and it increased to 359.50 million by 1996. The urbanisation ratio rose from 26.41% in 1990 to 29.4% in 1996. Compared with the rapid growth of the industrial production and the urban population, the development of infrastructure lags behind. As a result, environmental pollution and insufficient housing are the two major obstacles to sustainable urban development. In light of this, the Chinese Government has listed urban environment control and human settlement construction as major area for development fields.

In 1996, the national daily municipal water supply capacity increased to 185.168 million cubic metres and the tap water supply rate reached 95% of the urban population. In the same year, the centralised treatment rate of urban sewage was 23.62%, non-hazardous treatment rate of garbage and excrement was 49.06%, the municipal gas supply rose to 73.27% of urban households, a 123,000 km-long urban road network (with 7.58 square metres of road surface per urban inhabitant) was constructed, and forest cover of 24.4% (with 5.8 m<sup>2</sup> of forest cover per person) was achieved in city districts. Some cities suffering from water shortages have built water diversion channels to ease their water demand problem. The tap water supply has been extended to 32% of the towns and villages, benefiting 318 million people.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** Significant research related to sustainable human settlement has been conducted through the National Research Centre for Building Engineering and Technology and with the support of the State Science and Technology Commission. UNDP helped to produce a TV documentary about the achievements in environment and development in Benxi City.

**Financing:** From 1991 to 1995, there was a total investment of RMB 841.67 billion yuan in the municipal and township housing construction of the nation. New housing totaling 1.033 billion square metres of floor space was completed, thus resolving housing shortages for 5 million households. In 1995, the average per capita dwelling area was 7.9 square metres in urban areas and 16.9 square metres in rural areas. Rural housing has increased by 3.07 billion square metres over the last five years. 1995 was also the first year of the new housing project envisaged by the Chinese Government: 165 pilot cities received a total of RMB 15 billion yuan in loans from the Chinese Government and RMB 22.5 billion yuan from the local authorities (23.771 million m<sup>2</sup> have already been built). China has made significant progress in human settlements development, a fact that has been proven by the granting of the UN Human Settlements Award to several Chinese projects: the reconstruction of Tangshan after the earthquake, the building of the new residential quarters in Shenzhen, the rebuilding of the outmoded residential areas at Ju'er (chrysanthemum) Alley in Beijing, and the Combating Difficulty Housing Project in Shanghai.

**Cooperation:** No information available.

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## CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT DECISION-MAKING

**Decision-Making:** China has established six environmental laws, eight resources management laws, more than thirty administrative regulations, and three hundred and sixty environmental standards. Further laws have been established on education, health, culture and social security. Further improvements and adjustments are considered necessary, e.g. the strengthening of local legislation. By the year 2000, the basis for a system of legislation governing sustainable development should be in place. In July of 1996, the State Council held the Fourth National Conference on Environmental Protection in order to promote the implementation of a sustainable development strategy. Subsequently, the Decision of the State Council on Issues Related to Environmental Protection was drafted, and a specific sectoral five-year national plan for China's environment protection was ratified.

In 1992 and 1993, China developed a National Agenda 21 - White Paper on China's Population, Environment and Development in the 21st Century. A Leading Group co-chaired by a deputy minister of the State Science and Technology Commission and a deputy minister of the State Planning Commission was established in August 1992 to organise and coordinate the formulation and implementation of China's Agenda 21, which was approved by the State Council in March 1994. In 1994, the State Council also issued a directive calling on government institutions at all levels, to consider China's Agenda 21 as an overarching strategic guideline for the formulation of economic and social development plans, and particularly to integrate it into the Five Year Plan (1996-2000), plans for the year 2010, and into day-to-day management. Concurrently, government authorities under the State Council begun to engage in formulation of various sectoral Agenda 21s and plans of action, which were suited to their own area of specific requirement. For example, the Ministry of Forestry formulated the Forestry Action Plan for China's Agenda 21 which deals with sustainable development in forestry. The State Oceanic Administration drafted China's Ocean Agenda 21, China's National Environment Protection Agency formulated China's Agenda 21 for Environmental Protection, the Ministry of Water Resources drafted China's Agenda 21 on Water Resources, etc. Other government authorities have also formulated programmes of action according to their specific conditions and in line with the country's Ninth Five - Year Plan. Beijing Municipality, Hubei Province, and Guizhou Province were selected at local levels to integrate, on an experimental basis, China's Agenda 21 into their economic and social development planning. As a result, specific suggestions were made from the perspective of laws, policies, arrangements, finance and operation mechanisms, etc. so that a sustainable development strategy which can be implemented at local levels can be developed. In order to implement the sections in the Ninth Five-Year Plan and the Long-Term Objectives for the Year 2010 relating to environment protection, China formulated the Programme for Controlling the Total Amount of Main Pollutants during the Ninth Five-Year Plan, which states that, in order to meet the environmental goals set in the Ninth Five-Year Plan, strict regulations should be made for control of 12 main pollutants, the China Trans-Century Green Project, which is specifically targeted on areas with critical pollution problems, river basins, and some fundamental environmental problems, and particularly focusses on the water pollution of three rivers (Huaihe River, Haihe River, and Liaohe River), three lakes (Taihu Lake, Dianchi Lake, and Chaohu Lake), and acid rain in southwestern, central, southern, and eastern China, as well as on air pollution in 20 key cities and the Ninth Five-Year Plan and the Long-Term Objectives for the Year 2010 on Land and Water Conservation attaches great importance to the land and water conservation projects of the seven largest river valleys. In 33 key areas, land and water conservation projects of national level should be established to halt increasing land erosion, and efforts should be made to preserve an additional 650 thousand square kilometres of land by curbing soil erosion, by the year 2010.

In order to adequately manage the implementation of China's Agenda 21 at the macro level, the State Planning Commission and the State Science and Technology Commission, by the request of the State Council, gave priority to the incorporation of China's Agenda 21 into state planning. In July 1994, with the support of the UNDP, the Research and Training Programme on Incorporation of China's Agenda 21 into the National Economy and Social Development Plan was initiated. This programme, taking into consideration the overall development strategy and in view of the Ninth Five-Year Plan and Long-Term Objectives for the Year 2010, puts forth the following counter-measures and suggestions.

Major Groups, including women, children and the youth, minority nationalities and minority nationality districts, workers and labour unions, science and technology institutes, have been involved in the process of decision- making for sustainable development.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-building, Education, Training and Awareness-Raising:** Taking China's Agenda 21 as a guiding document in the drafting of the Ninth Five-Year Plan Long-Term Objectives for the Year 2010, the State Planning Commission, and various departments and bureaus under its jurisdiction, embarked on related research programmes and personnel training. Due consideration was also given to suggestions and plans from related fields and departments. The Administrative Centre for China's Agenda 21 (ACCA 21) is the bridge between domestic and international partners for the implementation of the Priority Programme for China's Agenda 21. It provides information on sustainable development, consultancy services for projects, training and public awareness material. China's International Training Centre for Sustainable Development (CITCSD) was established in 1993 in order to provide capacity building, provide training for administrative personnel, and promote public awareness.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** International cooperation for sustainable development is encouraged, especially in the area of training. Many international organisations and national governments have expressed interest and support for the implementation of China's Agenda 21. The UNDP-sponsored Capacity 21 Programme has played a catalyst role in promoting sustainable development in China. After the UNCED in 1992, China-UNDP cooperation has been very successful in the area of capacity building for sustainable development. China has formulated and implemented China's Agenda 21 with the support of UNDP. The Chinese Government and UNDP also signed the CSDNP (China's Sustainable Development Networking Project) in October 1995. In 1997, Capacity 21 Programme will continue to support China in the area of capacity building for local Agenda 21s.

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## CHAPTER 9: PROTECTION OF THE ATMOSPHERE

**Decision-Making:** In 1995, China promulgated the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution. Some seriously polluted cities have adopted a permit system for air-polluting material production and an experimental charge system for sulphur dioxide exhaust so as to control smoke and limit the emission of sulphur dioxide. The country has clearly defined acid rain and sulphur dioxide control areas and adopted stricter standards for exhaustion of sulphur dioxide from industrial pits and furnaces. In some seriously polluted cities of south-western China (such as Nanchong, Yibin, Chongqing, and Zunyi), smoke pollution and acid rain problems have been eased to some degree.

**Programmes and Projects:** In January of 1993, the Chinese Government approved the National Programme of China for Phasing Out of Ozone Layer-Depleting Substances and drafted an action plan. Specific measures for gradually eliminating designated materials have been taken in nine industries: air-dissolved rubber, foamed plastics, household refrigeration, industrial and commercial refrigeration, halon fire-fighting, tobacco, and electronic cleaning. This plan has been carried out in all enterprises.

**Status:** With the rapid expansion of the economic scale and the development of urbanisation, China is challenged with the serious task of controlling urban atmospheric pollution. The rapid development of urban transportation makes vehicle exhaust emissions the most serious difficult problem concerning urban air pollution control. Moreover, acid rain and the production of greenhouse gases and ozone layer-depleting substances are of great concern to the Chinese Government. Difficulties have been encountered in implementing the Montreal Protocol such as diverse competing interests, lack of funding, lack of technology and further economic and technical difficulties.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** With support of the World Meteorology Organisation (WMO) and the Global Environment Fund, a World Atmosphere Background Data Observatory was built in Wali Guanshan in 1994. This observatory has filled a gap in China's atmosphere background data observation. It is the first continental data observatory in Asia's heartland and an important component of the global atmosphere background observation network. China has also set up the National Climate Centre which began research and service work in January of 1995. This centre gives monthly, seasonal, and yearly flood forecasts. In order to improve the capabilities of forecasting short-term climate change and assessing the influence of climate change, China is vigorously organising the construction of a systematic engineering system for short-term climate forecast.

In order to control sulphur dioxide pollution, clean coal and clean combustion technologies have been introduced. Newly-built coal mines with high sulphur and lime content are accompanied by coal washeries. For smoke control, measures have been made to eliminate smoke, promote boiler innovation, and encourage central heating, all of which have proved to be effective. In 1996, the smoke-elimination rate of waste gas from coal combustion of industry reached 90% and the purification rate of waste gas from production technology reached 74.9%.

The Chinese Government is greatly concerned with global climate change and has actively organised research on this topic. With the cooperation of international organisations, some institutes have conducted research on "China's Greenhouse Gas Resources and Reducing Strategy" and "Climate Change Caused by the Greenhouse Effect and Its Influence on China". During the Ninth Five-Year Plan, China will emphasise research on the "Assessment of Influence of Climate Change on China's Regional Environment" and "The Influence of Greenhouse Gas Exhaustion on Climate Change and its Counter-Measures".

**Financing:** No information available.

**Cooperation:** China participates in the Global Ozone Observation Network and plans to establish a network of ozone observation stations. China will participate in international research and scientific and technological cooperation and will seek investment from the international community for projects which assist in the slowing

of climate change. The US Department of Energy supports China's country study on climate change. By the end of 1995, 156 projects had been approved by the Executive Committee of the Ozone Preservation Multilateral Fund and four of them had been completed. These efforts reduced emissions of controlled material by 6,000 tons (as calculated by the ozone layer-depleting potential value). Three CFC substitution centres in the rubber-dissolving industry have been constructed. This lays a solid foundation for the final achievement of complete substitution. By July of 1996, China had been granted than 170 projects from the Montreal Multilateral Fund. These projects have been successfully implemented.

The Montreal Protocol and the London Amendment were ratified in 1991. The latest report to the Montreal Protocol Secretariat was prepared in 1996. The United Nations Framework Convention on Climate Change was ratified in 1993.

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## CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

**Decision-Making:** The Ministry of Land and Resources is the leading agency responsible for overall management of land use in China, and is an administrative body of the State Council for planning, managing and protecting land resources, mineral resources and marine resources. It was established on the basis of the former Ministry of Geology and Mineral Resources, the former State Land Administration, the State Bureau of Oceanography and the National Bureau of Surveying and Mapping.

The following laws and regulations relevant to land management have been issued by the Chinese Government: the Land Administration Law, the Regulations on the Implementation of Law on Land Management, the Regulations on Protection of Basic Farmland, the Regulations on the Rehabilitation of Land, the Provisional Regulations on Land Appreciation Tax, the Administration Measures on Land Use for Construction, etc. The Land Administration Law was revised at the 4<sup>th</sup> Meeting of the Standing Committee of the Ninth National People's Congress on August 29, 1998. The newly revised Law is enacted in accordance with the Constitution for the purpose of strengthening land administration, protecting and developing land resources, making proper use of land, effectively protecting cultivated land, and promoting sustainable development of the society and economy. Moreover, illegal land use was included in the revised Criminal Law of the People's Republic of China (issued in 1997). Land management monitoring and inspection systems have been gradually established and completed, thus bringing land management onto the realm of legal administration. In recent years, the Chinese Government also promulgated and enforced the Law of the People's Republic of China on Water and Soil Conservation and the Regulations on the Enforcement of Law of the People's Republic of China on Water and Soil Conservation. All of these have encouraged the control of soil and water loss.

The macro-adjustment and control system has been established with the main contents of the overall plan for land use, the five-year plan for land use, and the annual plan for land use.

**Programmes and Projects:** Twenty-five major soil erosion controlled areas have been established at the national level. Soil and water conservation projects have been carried out in the seven large river basins. The accumulated eroded soil area under control is 67 million hectares. The integrated soil erosion control area in the Loess Plateau is 15 million hectares, putting 30% of the eroded soil area under control to some extent and decreasing the annual discharge of silt to the Yellow River by more than 300 million tons. In 1996, the State Land Administration Bureau engaged, for the first time, a number of inspectors for land management supervision and set up a social supervision system, an important measure towards strengthening the supervision of land law implementation.

The Government has set up a primary system of basic land zoning in order to protect farmland and is establishing a management system for land use. It has also drawn up the utilisation and management control system, which provides rational regulations on the location and scale of the land for urban and other kinds of construction. In addition to these steps, the Chinese Government has implemented the construction land management method, which focuses on land scales and allocation of projects, so that construction projects will utilise areas which are not useful for agricultural purposes. Examination and approval systems for all kinds of land use have been adopted. The management system, which focuses on the identification of ownership, registration, and granting of certification, has been established for the rural collective land ownership, reclamation, and development. In some areas, experiments have been developed to compensate peasants for valuable farmland lost to non-agricultural purposes. Under the premise of guaranteeing the original quantity and quality of the basic farmland reserves, new farmland with equivalent quality and quantity should be reclaimed to compensate for occupied farmland. In cases without reclamation conditions, a cultivation fee is required according to the regulations. This will result in a better utilisation of the total amount of farmland.

**Status:** Since 1989, basic farmland reserves have been established in China. By the end of 1996, 2,100 counties had finished the work and 65% of the farmland is under effective protection. The problem of farmland misuse has been resolved to a certain degree. Since 1988, when the Chinese Government promulgated the Regulations on Reclamation of Land, great progress has been made in the rehabilitation of abandoned land. According to statistics, 163,300 hectares of abandoned land have been rehabilitated or reused, 75% of which have been used for farmland or other agricultural purposes. In 1995, the State Coal Industry Ministry arranged 10 key demonstration projects such as the project in the area at the conjunction of Shanxi, Shaanxi, and Inner Mongolia

which rehabilitates 4,500 hectares of land annually (this being 22.5% of the total subsided area caused by coal mining in that year). Moreover, 1,770 hectares of slag hills were rehabilitated in open cut coal mine areas (amounting to 33% of the total slag hill area created that year). Since the early 1990s, Huaibei City of Anhui Province has made great efforts in the rehabilitation of the subsided land caused by coal mining. The accumulated rehabilitated area was 4,700 hectares, a rehabilitation rate of over 50%. The per capita usable land resources of China are very low and will continue to decrease in quantity and quality. Due to increasing population, industrialisation, and urbanisation, the demand for land resources has increased. A shortage in land resources has become a major limitation to the sustainable economic and social development of China.

Farmers have been mobilised to carry out comprehensive management of mountains, rivers, farmland, forests, and roads in the key 10,000 small river basins with serious soil erosion. From 1991 to 1995, 30,000 square km of soil erosion area and 10,000 square km of wind erosion area were brought under control each year. The Government has formulated the encouraging policy of those who control the area, get the benefit and carried out family contracting, corporate sharing, leasing, and auctioning of the usage rights of the land, as well as other kinds of control measures. These steps have protected the legitimate rights of farmers and aroused their enthusiasm to harness bare mountains and land. As a result of their efforts farmers have gained profits.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** The Canadian Government supports the Sustainable Resource Development Project in the Tarim Region.

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## CHAPTER 11: COMBATING DEFORESTATION

**Decision-Making:** The State Forestry Administration (former Ministry of Forestry) is responsible for all issues in this field. China attaches great importance to the development of forest resources and has formulated the Forestry Action Plan for China's Agenda 21, the Outline of China National Programme for Ecological Environment Improvement, the Key Points of the Programme for Comprehensive Forestry Development in Mountain Areas, etc.

The Forest Law of the People's Republic of China was promulgated in 1984, symbolising a new era for forestry development under the regulation of law. In pace with the deepening of economic system reform and the establishment of a market economy system, many provisions of the Forest Law promulgated in 1984 were in conflict with practical forest development. Therefore, the amendments of the Forest Law became an important task for forestry development. After 3 years' endeavour, the revised Forest Law was adopted by the Second Session of the Standing Committee of the Ninth National People's Congress. The revised Forest Law made additions, deletions and revisions of 26 articles of the original law. The new Law clearly defines "the ownership or tenure of forests, trees and forest land owned by the State and the collective, trees owned and forest land used by individuals shall be confirmed by governments at county level and above through registration and issuing certification. The State Council shall authorise the department of the State Council responsible for forestry to register and file the forests, tree and forest land in key State-owned forest regions defined by the State Council, to issue certification accordingly and to inform relevant local government." "The State shall protect the legal rights and interests enjoyed by the collectives and the individuals who contracted to plant trees." "The State shall set up Compensation Fund for Forest Ecological Benefits to be used for silviculture, tending, protection and management of forest resources and trees of shelter-belt and forests for special purposes which create ecological benefits. The Compensation Fund for Forest Ecological Benefits is a special fund that shall be used only for its specific purpose other than misappropriation. The detailed regulation on the Fund shall be made by the State Council."

The Government has put forward a number of general strategic objectives and countermeasures: strengthening breeding, protection and management of forest resources, enlarging forest areas, and improving the forest quality.

**Programmes and Projects:** The past seven years have seen the planting of large-scale shelter forests, implementation of ecosystem improvement programmes, and compulsory afforestation activities through nationwide tree planting and territory greening programmes. While protecting and making use of forest resources, the Government has made vigorous efforts to develop forest resources in mountain areas and develop forestry and fruit growing as the backbone industries of the regional economy in order to encourage social and economic development in poverty-stricken areas. For example, in Liuzhou, Guilin, and Hechi Prefectures of Guangxi Zhuang Autonomous Region and the 18 poor counties in five prefectures of Guizhou Province (which is known as the Ninety Thousand Mountain Area) through forest resources development, industrial structure adjustment, and developing the backbone industries of forestry and fruits, the forest cover of the area has been raised to 37.61% and the per capita income has increased by RMB 367 yuan.

The Three-north (namely northwest, central north and Northeast) Shelterbelt Development Programme started in 1978 and involves 551 counties of 13 provinces (autonomous regions and municipalities). The total area is 4.06 million square kilometers (42% of the State's land area and covering half of the northern part of China). The Shelterbelt Development Programme along the Upper and Middle Reaches of the Yangtze River covers 271 counties of 11 provinces. The first phase is between 1989 and 2000, in which total areas of 67.05 million hectares and 6.67 million hectares are to be afforested. Some 4.11 million hectares of forest plantation were established between 1989 and 1997, which met 61.6% of the total target. The forest cover increased from 19.9% to 25%. Soil and water erosions in over 100 counties were basically brought under control, and the speed of desertification and petrification in mountainous areas in Hunan, Hubei and Guizhou provinces began to diminish. The first phase of the Coastal Shelterbelt Development Programme (1988-2000), stretching across 195 counties of 11 provinces with a total area of 25.1 million hectares, is planned to increase 3.56 million hectares through tree planting. The Taihang Mountains Afforestation Programme, scheduled between 1986 and 2010, covers 188 counties of 4 provinces with a total area of 12 million hectares. It is planned to plant 3.957 million hectares of trees. The programme has played important roles in improving the ecological environment in north China, Beijing and Tianjin municipalities in particular, promoting economic development in Taihang

Mountain area and making farmers better-off. Farmland Shelterbelt Development Programme in Plain Areas, scheduled between 1988 and 2000, covers 920 plain, semi-plain and partial-plain counties in 26 provinces with a total area of 146.67 million hectares. It is planned to make 920 counties reach the afforestation standards. In addition to the five major programmes mentioned above, some new programmes were launched in 1995 in the Huaihe River Basin, Taihu Basin, Zhujiang River Basin, Liaohe River Basin, and the middle reaches of the Yellow River. These shelter forest programmes involve 609 counties of 16 provinces and the planned afforestation area is 6.6 million hectares.

In 1998, the Chinese Government launched the Natural Forest Protection Programme, involving the major State-owned forestry enterprises in 18 provinces (autonomous regions and municipalities) including Yunnan, Sichuan, Chongqing, Guizhou, Hunan, Hubei, Jiangxi, Henan, Shanxi, Shanxi, Gansu, Qinghai, Ningxia, Xinjiang, Inner Mongolia, Jilin, Heilongjiang and Hainan. Included are also some local forestry enterprises, logging and silvicultural units of ecological importance along the middle and upper reaches of the Yellow River and the Yangtze River, as well as those State-owned forest farms depending on harvesting natural forest as the pillar industry. The Natural Forest Protection Programme is implemented in two phases. The first phase from 1998 to 2000 mainly focuses on adjusting and reducing timber production from natural forest, establishing ecological protection forest for public benefits and commercial forest and projects for re-orientation, and re-directing excessive laborers and (or) re-settling laid-off workers. The second phase, from 2001 to 2010, mainly focuses on establishing protection ecological forest and projects for re-orientation, building up reserve resources, promoting the capacity of timber supply, and restoring and developing economy. Women, Children and Youth, minority nationality districts, worker and labour unions, science and technology circles have also been deeply involved in the activities of planting trees and combating deforestation.

**Status:** Since 1990, afforestation has covered 24.7 million hectares, regeneration through aerial sowing has seeded 12.74 million hectares, the area of mountain closure has reached 26.26 million hectares, and the national forest cover has increased from 12.98% to the present 13.92%. A significant increase of forest area and growing stock has been achieved and the trend of long-term decrease in forest growing stock has been basically reversed. Now there are only a few uncovered afforestation mountains or lands in twelve provinces.

China is deficient in forest resources. At present forests cover an area of 130 million hectares, which is only 3-4% of the total forest area of the world. The national forest cover is less than 14%. The available per capita forest area is only 0.11 hectares or 11.7% of the world average. This situation presents major environmental problems, such as soil erosion and land desertification as well as the increasing occurrence of natural disasters such as drought, floods, and high winds. All these environmental problems are closely linked with the shortage of forest, their uneven distribution, and low functional utility.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** Guided by the strategy of promoting afforestation through application of science and technology, the Chinese Government has promulgated a series of afforestation technology regulations and set up scientific and technological systems, information networks for scientific research, and technical extension and supervision, thus promoting the advanced scientific and technological achievements and practical technology to improve the quality of forest breeding and afforestation.

**Financing:** The revised Forest Law stipulates that the State set up Compensation Fund for Forest Ecological Benefits to be used for silviculture, tending, protection and management of forest resources and trees of shelterbelt and forests for special purposes which create ecological benefits. The Compensation Fund for Forest Ecological Benefits is a special fund that would be used only for its specific purpose other than misappropriation. The detailed regulation on the Fund would be made by the State Council.

**Cooperation:** No information available.

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## CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

**Decision-Making:** The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, particularly in Africa was ratified on 18 February 1997. In 1993, the Regulations regarding Law on Water and Soil Conservation was put into effect. A comprehensive system of administrative agencies for water and soil conservation ranging from the central Government to local authorities was established. The Government has established the National Coordination Panel for Desertification Control and has approved the inclusion of the desertification control projects in the national economic and social development plans.

Since 1990, the Chinese Government has taken a series of steps to control desertification. It has formulated the National Planning Programme for the Control of Desertification in 1991-2000 and the National Action Plan for the Control of Desertification of China. The Chinese Government has also promulgated the Comments on Several Policies and Measures for the Control of Desertification, which gives preferential low interest loans for desertification control. To counter different types of desertification, the Government focused on 20 major counties and established 9 experiment areas and 22 experiment and demonstration bases. From 1991 to 1995, 4.29 million hectares were brought under control, of which 1.22 million hectares were subject to sandy land enclosure, afforestation, and grass planting.

The Chinese Government attaches great importance to preventing and combating desertification, and has formulated and started implementing the national ten-year Anti-Desertification Programme before the negotiation of the Convention. China has included this programme in China's Agenda 21.

**Programmes and Projects:** No information available.

**Status:** Although the Chinese Government has allocated financial and material resources to deal with the problem, the resources still fall far short of the actual needs. In this context, China needs financial and technological support from the international community, especially from the developed countries, to better address desertification and achieve sustainable development in ecologically fragile areas so as to make her contribution to the global effort at combating desertification and protecting the ecological environment.

**Capacity-building, Education, Training and Awareness-Raising:** In order to enhance the awareness of government personnel at all levels concerning desertification, China has held three High-Level Workshops on the UN Convention on the Prevention of Desertification during the past two years.

**Information:** No information available.

**Research and Technologies:** The Government has established the Chinese Research and Development Centre for the Control of Desertification, as well as several training and monitoring centres. It has promulgated the Principle Technology Programme for Monitoring Desertification.

**Financing:** No information available.

**Cooperation:** In October of 1994, the Chinese Government signed the Desertification Convention. In order to strengthen international cooperation in combating desertification, China, in collaboration with Japan and the UN Special Coordinator's Office for Africa and the Least Developed Countries, hosted the Asia-Africa Anti-Desertification Seminar (1996, Beijing), at which twenty countries from Asia and Africa exchanged experience in combating desertification, explored possible activities of cooperation, and adopted the Asia-Africa Action Framework on the Prevention of Desertification.

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## CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

**Decision-Making:** No information available.

**Programmes and Projects:** The Programme for Comprehensive Development of Forests in Mountain Areas has been drawn up. Many projects in the field of rural development, agriculture, forestry and water resources development cover mountain areas and address mountain development issues. The Taihang Mountains Afforestation Project involves 110 counties from Beijing, Hebei, Henan, and Shanxi Provinces. It was planned that 3.56 million hectares of forests would be planted by 2050. Since 1993, 1.31 million hectares have been afforested. The Mountain, River and Lake Project of Jiangxi Province focuses on comprehensive sustainable agricultural development and control of mountains, rivers, and lakes and is a large drainage area control project. With the comprehensive planning, development, and control of over 160,000 square kilometres, over 2 million farmers have been brought out of poverty. Water and soil erosion, ecological deterioration, environmental pollution, and endemic diseases have been effectively controlled. Clearly, a solid basis for future sustainable development has been created in the mountain, river, and lake areas.

**Status:** Since 1990, 26.26 million hectares of land in mountain areas have been afforested. While protecting and making use of forest resources, the Government has made vigorous efforts to develop forest resources in mountain areas and develop forestry and fruit-growing as the backbone industries of the regional economy in order to encourage social and economic development in poverty-stricken areas. For example, in Liuzhou, Guilin, and Hechi Prefectures of Guangxi Zhuang Autonomous Region and the 18 poor counties from five prefectures of Guizhou Province (which is known as the Ninety Thousand Mountain Area) through forest resources development, industrial structure adjustment, and developing the backbone industries of forestry and fruits, the forest cover of the area has been raised to 37.61% and the per capita income has been increased by RMB 367 yuan.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

**Decision-Making:** The Ministry of Agriculture is responsible for China's agriculture and rural development. China intensified legislation and law enforcement relating to environmental protection over the past few years. China has formulated six environmental laws and nine relating resources laws, including the Law on Environmental Protection, the Law on the Prevention and Treatment of Air Pollution, the Law on the Prevention of Water Pollution, the Law on Environmental Prevention and Control of Solid Waste Pollution, the Law on Environmental Prevention and Control of Noise Pollution, and the Law on Maritime Environmental Protection. The newly revised Criminal Law has added a clause on crimes relating to destruction of environment and resources. The government has also promulgated 28 legal regulations and 70 statutes, and localities have put forward more than 900 local regulations relating to environmental protection. A total of 375 relevant standards provide an effective environmental management system which defines the norms for the evaluation of impacts on environment, assessment of comprehensive treatments on urban environment, and control on pollutants. The Chinese government formulated three major environmental policies characterised by stressing prevention while combining prevention with control, forcing pollution-makers to finance treatment, and strengthening environmental management.

Practical measures have been taken to lighten the burden on farmers. These measures include implementing the policy of collecting reasonable and limited charges for specified items, which remain unchanged for at least three years, and resolutely banning indiscriminate charges, unauthorised fund-raising and arbitrary fines and quotas. The development of small cities and towns is accelerating. Local governments do good jobs in experimenting with the reform of the management system for household registration in cities and towns, and promoting small cities and towns to play roles in achieving economic development in rural areas and improving the quality of life of farmers. Great efforts have been made to increase the income of farmers. The system of non-governmental services is improved in agricultural development, and more industrialised agricultural operations are developed thus increasing the degree of processing and the conversion rate of agricultural products. More rural work force is organised to work on infrastructure development. During their service, the income of the rural workers increased. Most regions in the country are restructuring rural enterprises, paying particular attention to quality, economic performance and environmental protection and focusing on processing of agricultural and subsidiary products and their storage, preservation, transportation and marketing.

**Programmes and Projects:** China intensified capital construction for agricultural development, focusing on water conservancy. The government at all levels sped up the work of harnessing major rivers and lakes and repairing the facilities damaged by floods, focusing on reinforcement of banks to ensure safety during the flood season. Farmers doubled their efforts to improve the environment, planting trees and grass on a large scale and developing environmentally friendly agriculture. They made efforts to return farmland to forests and turn hillsides into terraced fields. Restoring and increasing grassland vegetation and taming small rivers were helpful in reducing soil erosion. Measures were made to continue protecting natural forests and develop 10 shelter forest projects.

The most pressing is to solve the food and clothing problem. The key to successfully handling this is to find sources of funds. Over the past few years, many local governments found good methods to raise funds. For instance, funds in areas with good economic conditions came from village collectives, while in areas with poor conditions, local governments managed funds. Qinghai Province, which is inhabited by many ethnic minority groups, is a poverty-stricken region typified by many disasters. Under exceedingly difficult financial circumstances, the provincial government made efforts to raise funds to support people who are in financial difficulties and establish associations for grain storage. It also set up a basic living guarantee system combining state allowances with collective support, individual savings and social donations. Shandong is a province with a rapidly developing social guarantee system, which covers 80 percent of the rural population.

**Status:** By 2010, China plans to achieve her GNP as twice as that in 2000 and a better life for her people; by 2020, to achieve further development of national economy; and by mid 21 century, to basically realise modernisation. To achieve these goals, China puts agriculture at the top of its economic agenda and highlights sustainable agricultural development. In China, agriculture restructuring needs further to be undertaken. The area sown in grain crops in 1999 is maintained at 110 million hectares and the total grain output will reach 495 million tons. The farmers adjust the pattern of cultivation to meet market demand and improve the quality of

farm produce. China's per-capita cultivated land is limited and the quality is not high. Although the Government has set the target for the total amount of cultivated land and begun to freeze the occupation of cultivated land for non-agricultural construction since 1997, the decrease of cultivated land in 1998 still surpassed that in 1997. The organic substance in the soil of cultivated land basically remained stable. The application of organic fertiliser declined and the soil quality deteriorated to some extent. At the present stage, the social guarantee system in rural areas is mainly composed of six items, including social relief, old-age insurance, special care for the disabled, family members of revolutionary martyrs and servicemen, social mutual benefit and cooperative medical care, and a social guarantee service network. However, because of different levels of economic development, it is impossible to set up the system simultaneously in all areas.

**Capacity-building, Education, Training and Awareness-Raising:** The Chinese government chose and put into practice the strategy of developing agriculture by relying on science, technology and education. A series of measures have been adopted to enable science and technology to play a greater role in increasing agricultural production. In order to enable new labour recruits to receive primary vocational training, a streaming system is adopted at the primary school and at the second grade of the junior middle school. Students are given both diplomas and "green certificates." In addition, training is given to ordinary labourers under 50 by broadcasting schools, technology extension schools, senior agricultural middle schools, and agricultural technical schools. Those who pass the examinations will be given "green certificates." In order to enhance farmers' abilities to accept and apply new agricultural technologies through extensive vocational training, especially through the "Green Certificate" project, China is taking measures to fully use her existing 500-odd agricultural and forestry poly-technical schools, more than 2,000 country-level agricultural broadcasting and TV schools, and grass-roots agricultural technology popularisation organs. By 2000, 10 million farmers will obtain such certificates and a large number of grain-growing experts will emerge.

**Information:** The successful launching of Fengyun-I and Fengyun-II meteorological satellites helped China achieve significant results in reducing natural disasters. In November 1998, China Satellite Disaster Reduction Center was formally established. Following the successful launching of Fengyun-I and two other meteorological satellites, China is expediting the development of Fengyun-III, a new-generation meteorological satellite. Fengyun-III is designed to study the laws governing the global climate and its changes, monitor wide-range climate changes, natural disasters and the environmental ecology, and provide related departments with meteorological information from different regions throughout the world.

**Research and Technologies:** While restructuring industries and upgrading technology, various localities and departments are striving to popularise clean production and make a number of high energy-consuming and heavy polluting techniques and equipment obsolete. The agricultural R&D institutions continue to expand the application of advanced practical agricultural technologies, especially various forms of more efficient water-saving irrigation, such as seepage control of channels, water conveyance by low-pressure pipelines, spray irrigation and drip irrigation, and dry farming techniques. In areas where conditions permit great efforts are made to develop precision agriculture.

**Financing:** The use of foreign capital partially contributed to the speedy development of agriculture. By the end of 1997, foreign-funded agricultural projects numbered 7,896 in China, involving US\$12 billion in foreign capital. This included 814 launched in 1997, with committed and paid-in foreign capital totalling US\$1.07 billion and US\$628 million respectively. Foreign capital absorbed by the sector mainly comes from three sources: overseas loans, foreign aid and direct investment by foreign businesses, according to available statistics, respectively accounting for 44.5 percent, 10 percent and 44.5 percent of the total foreign capital. Capital acquired through foreign aid was mainly used to assist poor areas in developing economy, upgrading technology and training personnel. Experts deem direct investment from overseas businesses as the most vigorous and flexible method for the utilisation of foreign capital. Prior to 1996, preferential loans and various kinds of aid, which made up more than 80 percent of the total amount of foreign capital, were used by the agricultural sector. Foreign-aid projects focused on poverty-stricken areas. Their implementation played an important role in promoting the development of agriculture and rural economy in poor areas, improving local people's living standards and eliminating poverty. Major projects include food aid provided by the World Food Programme (WFP) since 1980 and the WFP-funded comprehensive agricultural development programme through the work-relief project. By the end of 1996, The WFP had ratified 58 food-aid projects in China, valued



at US\$750 million. The majority of these projects are located in the 169 state-and provincial-level poverty-stricken counties, benefiting more than 20 million local residents.

**Cooperation:** In China, green food has only emerged recently and the efforts have been fruitful. A total of 37 associated agencies and 56 environmental monitoring organs related to the production of green food have been established throughout the country. A national network for the production, management, quality control and technical supervision of green food is taking form. Standards relating to the environment required for the production of green food and the utilisation of production means such as fertilisers, pesticides, food additives and feed additives, as well as technical procedures for 72 varieties of crops in the seven major geographical areas have been established. A standard system for the full-range quality control of green food production has made initial shape. The green food market has made considerable progress. In 1997, the World Agriculture Association recommended the China Green Food Project to UNCSD as one of the 20 most successful sustainable development modes in the world.

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## CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

**Decision-Making:** The National Environmental Protection Agency (NEPA) is the lead organisation for the protection of biodiversity. The Ministry of Forestry, the Ministry of Agriculture, the State Administration of Oceanography and the Ministry of Construction are responsible for providing management in their respective areas. The State Planning Commission and the State Science and Technology Commission also have responsibilities for the conservation of biodiversity. The Standing Committee of the National People's Congress has established a Committee for Environmental and Resource Protection within its framework. Local governments have agencies similar to those in the central Government, which have been established to address local issues in the conservation of biodiversity.

China has successively formulated and promulgated laws and regulations such as the Forest Law, the Law of Fishing, the Wildlife Protection Law, the Management Regulation of Natural Reserves, the Regulation Concerning Continental Wild Animals, the Regulations for the Protection of Aquatic and Wild Animals, the Regulations on Wild Flora Conservation, the Regulations on Management of Forest and Wildlife Nature Reserves, the Provisions Governing Hunting Guns and Bullets, the List of Key Protected Wildlife of National Importance, and the National List of Rare and Endangered Plants. The various provinces, autonomous regions, and municipalities directly under the central Government have formulated and issued corresponding local laws and executive regulations. The Environmental Protection Committee (under the National People's Congress) and the State Council have inspected the enforcement of environmental protection in fishery and forestry departments, and strictly prosecuted those offenders who have seriously destroyed the wild fauna and flora resources (such as excessive hunting and smuggling).

In order to fulfill the UN Convention on Biodiversity, the Chinese Government has formulated China's Biodiversity Conservation Action Plan and the Country Study Report on Biodiversity in China, carried out comprehensive assessments of its biodiversity, indexed endangered animals and plants, and put forward policy suggestions regarding the strengthening of national capacity for biodiversity protection and the sustainable utilisation of biological resources. China has set up management offices and scientific committees for the import and export of endangered species. Management institutions for wild animals and plants, as well as the nature reserves, have been established in 25 provinces, autonomous regions, and municipalities directly under the central Government.

NGOs, such as the Chinese Society of Environmental Sciences, the Chinese Ecological Society, the Chinese Society of Forestry, the Chinese Society of Agronomy, the Chinese Society of Oceanography, the Chinese Society of Botany, the Chinese Society of Zoology and the Chinese Association of Wildlife Conservation, play an active role in biodiversity conservation in coordination with the governmental agencies.

**Programmes and Projects:** The Chinese Government has carried out a series of rescue projects for endangered animals that have led to the restoration of many species. By the end of 1995, China had established 175 animal parks and animal exhibition zones in the parks, and 227 breeding centres for wild animals. The project for the protection of giant pandas and their habitats has been carried out with 28 panda protection zones already established or still under preparation. There are currently a total of 1,000 giant pandas from several different species. The population in each of the species is stable. Nipponia birds were an endangered species world-wide with only seven in China in 1981 upon their rediscovery. Now, there are more than 60 in China due to the rescue project. The artificial breeding of Yangtze crocodiles has been a success, with a current population of more than 4,000. The population of Hainan deer has increased to more than 500 from the initial 50. In order to rescue and breed endangered or rare plants, China has successively set up more than 400 stations for rare plants protection and breeding, and more than 120 botanical gardens and tree gardens. These measures have protected 1,800 species, enabled 90% of the wild plants under national protection to be moved (and thus protected), and enabled nearly 1,000 rare plants to be protected and bred. The artificial breeding of the Chinese unique cathy fir, metasequoia, and Chinese parasol has been remarkably successful. The Chinese sturgeon has also been well protected in the middle and lower reaches of the Yangtze River. Seven protection stations, one protection zone, and one rescue centre for the Chinese sturgeon have been established. Every year, over 300,000 young Chinese sturgeons are put into the Yangtze River. This keeps the population of the Chinese sturgeon stable in the Yangtze River.

**Status:** China is a large country with a biodiversity of global significance. For a long time the protection of biodiversity has been facing serious challenges due to the rapid population growth and changes in the biological environment. China's nature reserves network has been greatly developed. This has effectively protected most of the representative and scientifically valuable ecosystems, and endangered rare species. By the end of 1996, there were 799 nature reserves (including 106 state-owned) which were designed for the conservation of a variety of species. The area of these nature reserves totals 71.85 million hectares, accounting for 7.2% of China's land area. Twelve of these reserves have joined the Man and Biosphere International Protection Zone Network. China has also set up 752 forest parks with a total area of more than 6.6 million hectares. These have become important places for the protection of ecosystems and local species.

**Capacity-building, Education, Training and Awareness-Raising:** China has disseminated laws and regulations, such as the Regulations for the Protection of Aquatic and Wild Animals, and popularised the scientific knowledge of wild flora and fauna through various media and activities such as Bird-Loving Week, Biodiversity Day, Publicity Month for the Protection of Wild Animals, public lectures, exhibits, etc. Each year for the past ten years, the organisations for wildlife administration and environmental protection at national and local levels have held quiz games, composition contests, and summer camp activities about wild animal and plants for primary and middle school students. Such special programmes as Animal World and Humans and Nature on CCTV (China Central Television) have become popular programmes with great influence.

**Information:** The Chinese Government has set up several special biodiversity information systems. The Chinese Academy of Sciences alone has established a relatively complete biodiversity information system which includes 5 subject branches, 25 data sources, and more than 30 databases. A species and products resource database system for agriculture has been established by the agricultural departments, including 15 agricultural products, 270,000 seeds samples, and 12,590,000 data entries. The National Environmental Protection Agency has set up a database for nature reserves across the country. An ecosystem and biodiversity study and monitoring network, composed of 78 ecological stations, has been established in China. China started the compilation of the Red Book of Plants in China and the Red Book of Animals in China. These books will have eight volumes, three of which are already finished. China also published the List of Ecosystems under Priority Protection, the List of Animals under Priority Protection, and the List of Wild Plants under Priority Protection .

**Research and Technologies:** Research institutions for the study of endangered animals and plants have been set up in northeastern, northwestern, and southern China. In Sichuan, Hunan, Guangdong, and Guangxi Provinces, 19 protection and breeding centres have been established for endangered wild animals and plants such as the Northeast tiger, elk, wild horse, high-nose antelope, nipponia bird, Chinese sturgeon, Yangtze alligator, golden-striped tortoise, etc. Across China, there are over 300 artificial breeding farms for wild animals and plants, one national bird centre, fifty bird stations, and five white-flag dolphin protection stations.

**Financing:** No information available.

**Cooperation:** Ten nature reserves have been included in the International Network of Biosphere Reserves by UNESCO. Six nature reserves have been listed in the List of International Important Wetlands. The US-based MacArthur Foundation supports the project Forest Resources Management and Biodiversity Protection in the Gaoli Gongshan Natural Reserve.

The Convention on Biological Diversity was ratified in 1993. The latest report was submitted in 1994. The Convention on International Trade in Endangered Species of Wild Fauna and Flora was ratified in 1981.

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## **CHAPTERS 16 AND 34: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY AND TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING**

### **Decision-Making:**

*Technologies:* No information available.

*Biotechnologies:* No information available.

### **Programmes and Projects:**

*Technologies:* No information available.

*Biotechnologies:* No information available.

### **Status:**

*Technologies:* No information available.

*Biotechnologies:* No information available.

### **Capacity-Building, Education, Training and Awareness-Raising:**

*Technologies:* No information available.

*Biotechnologies:* No information available.

### **Information:**

*Technologies:* No information available.

*Biotechnologies:* No information available.

### **Research and Technologies:**

*Technologies:* No information available.

*Biotechnologies:* No information available.

### **Financing:**

*Technologies:* No information available.

*Biotechnologies:* No information available.

### **Cooperation:**

*Technologies:* The establishment of China's Environmentally Sound Technology Transfer Centre is underway with the support of the Asian Development Bank. The objective of the centre is to enhance the capacity of China in exchange and acquisition of EST information and in the assessment, introduction, development and application of appropriate ESTs, in order to foster EST transfer, to reduce industrial pollution, and to realise sustainable industrial development.

*Biotechnologies:* No information available.

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## **CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES**

**Decision-Making:** The State Oceanic Administration is the lead agency responsible for China's ocean policy making and overall management. The State Science and Technology Commission, the Chinese Academy of Sciences, and the Ministry of Agriculture are also major governmental agencies involved in coordination of domestic oceanic affairs.

A mechanism and a legal system for the management and conservation of marine resources have been established. On the basis of the existing laws concerning marine environmental protection, China is drafting the Exclusive Economic Law on the Continental Shelf of the People's Republic of China and the Law on Maritime Resource Utilisation Management. China is emphasising the creation of domestic law consistent with the international maritime laws. It has formulated an oceanic zoning system and national and regional plans for oceanic exploration. It has also created a licensing system for waste discharge into the sea. During the past few years, China has designated 38 areas for waste discharge. Through strengthening law enforcement and monitoring, the Government effectively stopped illegal discharge of wastes into seas. For the control of maritime petroleum exploration, the Government strictly requires that the exploring department be furnished with sewage disposal facilities, and emergency and monitoring facilities for oil-spilling. Early in 1995, a common understanding on the principal strategy, objectives, and countermeasures of China's maritime work in the 21st Century was reached after several discussions organised by the State Oceanic Administration and attended by local governments in the coastal areas, ministries in charge of foreign exploration and management, and marine research specialists. After more than one year's efforts, the State Oceanic Administration formally released China's Ocean Agenda 21 in May of 1996 and formulated an Action Plan. These became the guidelines and action framework for the exploration and protection of maritime resources, the improvement of the polluted marine environment, and the implementation of sustainable development.

**Programmes and Projects:** In 1993, the Xiamen coastal area was chosen as one of the three demonstration areas for the "Maritime Pollution Prevention and Control Project in South Asian Maritime Space" by UNDP, the Global Environment Facility and the International Maritime Affairs Organisation.

**Status:** China has a vast maritime space, a long coastal line, and rich marine resources. At present, the marine industry has become a new area of growth for the coastal regions economic development. According to available information, the total annual output of China's marine industry is over RMB 220 billion yuan. Therefore, China considers rational utilisation of marine resources and the protection of marine environment as inseparable and has taken steps to develop and strengthen marine resource management and marine environmental protection.

Through research and practice, the control work of Xiamen coastal area has entered into a stage of programming, coordinated management, joint law enforcement and rational exploration. This has provided examples for the entire country in the management of coastal areas, especially in the prevention of sea pollution. In recent years, the Chinese fishery department has clearly stipulated that fishery fallowing must be carried out in the East China Sea and Yellow Sea in July and August 1999. This has achieved good results in the protection of maritime fishery resources. Since the early 1990s, 25 nature preserves have been set up, covering a total area of 660,000 hectares. Also, a special ocean environment preserve is planned to effectively protect typical ocean ecosystems and endangered species.

**Capacity-Building, Education, Training and Awareness-Raising:** No information available.

**Information:** China has set up a national maritime environment monitoring network and made improvements in the national maritime information service system and the maritime environment forecast system. At present, the maritime monitoring force is composed of planes, ships, land stations, and buoys. It is responsible for monitoring and supervising the sea environment. The maritime information system and the maritime forecast system have begun to form. People can get timely information on changes in trends of the maritime environment and the daily forecast is broadcast through the central and local radio, and TV stations. This system also provides warnings to prevent disasters due to sudden storms. China has also set up an information-

sharing mechanism with nearly 100 institutions in more than 60 countries. China is actively promoting the implementation of the global ocean monitoring system programme and participating in the Northeast Asia Ocean Monitoring System Programme. China also formulated a national Oceanic Eco-Environment Monitoring Network Plan.

**Research and Technologies:** In 1989, China began to conduct a survey of sea islands. After eight years, it came to a successful end in 1996 with a primary understanding of the quantity of the country's sea islands and the marine resources on and near these islands, as well as the environmental, social, and economic conditions of the islands and surrounding areas. These steps have laid the foundation for rational exploration and utilisation of China's sea islands. Since 1993, China has approved six sea islands national comprehensive experimental development areas (Changdao Island of Shandong Province, Zhoushan Liuheng Island of Zhejiang Province, Haitan Island of Fujian Province, Changhai Island of Liaoning Province, Nan'ao Island of Guangdong Province, and Weizhou Island of Guangxi Province.) After more than three years of construction, outstanding benefits have been achieved. For example, in the experimental area of Liaoning's Changhai Island, people made great efforts in the development and promotion of seven floating-raft aquaculture projects and seabed sowing technology, including those for shrimp and scallops. The ratio of input to output is 1:3.5. The total annual economic profit of these projects is more than RMB 340 million yuan. In order to strengthen the comprehensive management capability of coastal areas, China has listed some key technology research areas in the Ninth Five-Year Plan for intensive scientific and technological attention. They include: research on key technologies for utilisation of coastal resources and environment, research on key technologies for comprehensive utilisation of sea water resources, research on key technologies for oceanic energy generation, and research on key technologies for membranes. In 1996, China started to implement a programme to develop the ocean through application of science and technology, and to promote economic development in coastal areas.

**Financing:** No information available.

**Cooperation:** China is involved in cooperation on international marine legislation, marine living resources in high seas, seabed mineral resources, marine scientific research, marine environmental protection, polar exploration and peaceful use, and marine affairs cooperation and exchange in the Asia-Pacific Region. The UN Convention on the Law of the Sea was ratified in 1996.

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## **CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES**

**Decision-Making:** The Ministry of Water Resources is responsible for overall water resources planning and management, major hydro infrastructures, and large hydropower generation. The Ministry of Construction is responsible for urban waste water treatment investment, whereas the National Environmental Protection Agency is responsible for waste water legislation and discharge compliance monitoring. However, the State Council has its special committee in coordination with water cross sectoral issues to determine its major policy and action, for example, during 1996 and 2000, waste water control is focused on three large rivers and three main lakes in China. This committee is chaired by the State Councilor, Chairperson of the State Science and Technology Commission. The State Planning Commission contributes an important role in the major water projects decided in every 5- year national planning, in which the overall budget is approved.

In order to implement China's Agenda 21 in the area of water conservation, the Chinese Government has formulated China's Water Conservation Agenda 21 and the National Plan for Medium- and Long-Term Water Supply and Demand. This agenda has put forward the general objectives for water resource protection and sustainable utilisation. The objectives are: to implement the policy of rational exploration, utilisation, and comprehensive conservation of water; to strengthen the management of river basins and lakes; to improve the management and control of water pollution; and to vigorously maintain and improve the natural utility of water resources and the ecological environment of basins. In the Ninth Five-Year Plan (1996-2000), the water issue is placed at its importance above all other threatening factors. The main tasks include flood control, irrigation efficiency, hydro power station, drinking water improving in dry regions. In fighting with waste water, China has set up its focus on three large rivers: Huaihe, Haihe and Liaohe, and three main lakes: Taihu, Chaohu and Dianchi as the targets for clear up the water in a limited time period. Small production capacity industry is now met with very restricted regulation to either meet discharge compliance within a limited time or shut down. Developing and introducing suitable waste water treatment technologies and establishing integrated water resources management system are placed in China at high priority in dealing with water challenges.

**Programmes and Projects:** During the past five years, the Chinese Government has strengthened the integrated development and management of major rivers and lakes. The main objective of this programme is to prevent flooding disasters by heightening and reinforcing major dams, building flood-division areas, and realigning river courses in major rivers and lakes such as the middle and lower reaches of the Yangtze River, the lower reaches of the Yellow River, Huaihe River, Haihe River, Songhuajiang River, Liaohe River, and Taihu Lake. A group of important large-scale water conservation projects have been developed to allow more effective control and bring comprehensive benefits. In order to solve the problem of water shortages in northern China, the Chinese Government has vigorously organised the planning and construction of trans-basin water-transferring projects, conducted a scientific feasibility study of transferring water from the south to the north in the central, eastern, and western parts of China, and made preliminary preparations for the project. In order to bring water pollution under effective control and protect the aquatic environment, beginning in 1994 the Chinese Government carried out the Three Rivers and Three Lakes water pollution control project (Huaihe River, Haihe River, Liaohe River, Taihu Lake, Dianchi Lake, and Chaohu Lake). In 1995, the Interim Regulations on the Protection against Water Pollution in the Huaihe River Basin was issued and the Programme and Ninth Five-Year Plan of Water Pollution Control in the Huaihe Basin was formulated by the Government. It also defined the targets for controlling the total amount of water pollutants discharged into river basins, as well as the maximum permissible discharge amount for major cities, towns, and discharge points. Meanwhile, a deadline was set for closure or production changes in those small-sized paper mills whose production capacity was less than 5,000 tons in the Huaihe Basin. By June 30th of 1996, 1,111 small paper mills in four provinces along the Huaihe River had been closed, reducing COD discharge by 346, 000 tons, and achieving the objective of a 15% reduction in pollutants for that year. The Chinese Government has organised the compilation of the China Water-Conserving Development Programme for Irrigation Agriculture, drawn up the technology standards suitable for national conditions for various water-conserving irrigation projects, and formulated the plan for the construction of large-scale water-conserving irrigation demonstrations at the national level. At present, the total area covered by water-conserving irrigation has reached 13.33 million hectares. In order to solve the drinking water problems of some poor rural areas, the Chinese Government carried out a drinking

water project for those areas in 1990. Since 1991, 145,000 drinking water projects have been built, 470,000 drinking water wells have been dug, 199,000 water-collecting facilities have been established, and 174 million rural people have had the problem of inadequate drinking water resolved. With the cooperation of UNICEF, the Government has carried out the Trinity project (water, environmental hygiene, and health education) and achieved preliminary progress. Moreover, the Government has spread low-cost water supply measures and sanitary toilets, and disseminated health knowledge to farmers. With the implementation of the Sweet Dew Project, more than 4 million people in Shanxi Province and 3.8 million herdsmen in Inner Mongolia Autonomous Region have achieved adequate drinking water supplies during the past 3 years. A series of drinking water projects have also been carried out in Xinjiang, Gansu, and some other western provinces. All these have eased, to some degree, the difficulties of peasants in water-short areas. The Chinese Government has greatly promoted the western water resource development plan and carried out a number of utilisation projects that focus on the central and western regions. These projects include the Xinjiang Wuluwati Reservoir project, Tibet Manla Reservoir project, Guizhou Wangerhe Reservoir project, Qinghai Heiquan Reservoir project, Ningxia Fuyanghuang irrigation project, Gansu Changma Reservoir project, etc. These projects will play a very important role in promoting the social and economic development in central and western China, changing the poor and backward situation, improving the eco-environment, and strengthening national solidarity.

**Status:** In China, freshwater resources are inadequate and unevenly distributed. China's per capita water resources is only one-fourth of the world average. With the growth of the population and economic development, serious water shortages have appeared not only in the arid and semi-arid areas, but also in many cities of northern China. This has become a limitation to economic development. Moreover, all the river basins of the country have been polluted to various degrees, resulting in a further decrease of water resources utility. Therefore, it is important to implement sustainable development in order to rationally use and protect water resources.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** Some practical water-conserving technologies have been developed and these are being used in the technical preparations for the establishment of 300 demonstration counties for water-conserving irrigation projects during the Ninth Five-Year Plan.

**Financing:** No information available.

**Cooperation:** UNDP and several national governments are providing support to a development and conservation project for the Yellow River delta and to the Integrated Development and Management Project of the Mountain-River-Lake Region of Jiangxi Province.

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## **CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS**

**Decision-Making:** The Ministry of the Chemical Industry is the lead agency dealing with toxic chemicals overall policy and management. The National Environmental Protection Agency is responsible for legislation of all kinds of solid waste environmental compliance and monitoring, and as well for prevention of illegal international traffic in hazardous wastes. In order to control the import of hazardous wastes, in 1991 China promulgated the Circular on the Strict Control of Transfer of Hazardous Waste into China. After several experiences with hazardous waste import, China promulgated in November of 1995 the Urgent Circular on Resolute and Strict Control of Transfer of Foreign Waste into China. Also, in March of 1996, the Government promulgated the Provisional Regulations on Waste Import and Environmental Protection. China is resolutely prosecuting those discovered to have imported hazardous waste. The Government also urged the countries concerned to observe the Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal and has instructed the enterprises concerned to return the waste to the donor country and make compensations for relevant loss.

In terms of waste registration, the Government has begun to carry out a permit and manifest system for the centralised utilisation and disposal of wastes. In April 1993, the National Environmental Protection Agency promulgated the Implementation Programme of Experiments on Waste Exchange, which defines the waste exchange's basis, type, treatment process, procedure, experiment requirement, etc. Three years of experimental work has laid a solid foundation for waste exchange.

**Programmes and Projects:** In order to safely dispose of hazardous wastes, China has built a standard waste disposal plant in Shenzhen City. Regional centralised waste burning and burying plants are also being built in Beijing, Tianjin, Shanghai, and Guangzhou. These plants have improved the cities' environment.

**Status:** Since 1992, China has promoted waste minimisation in the industrial departments. Efforts have been made to conserve resources, reduce consumption, recycle, and make comprehensive use of wastes. Meanwhile, a series of solid waste storage and disposal facilities have been built. These efforts remarkably reduced the amount of industrial waste from 33.76 million tons in 1991 to 22.42 million tons in 1995. Also, the amount of waste poured directly into rivers, lakes, and seas each year has dropped from 11.81 million tons in 1991 to 6.49 million tons in 1995. As a result of its extensive production pattern, China's industrial solid waste output is about 644 million tons each year, of which 2.4% is considered hazardous (poisonous, reactive, corrosive, explosive, or flammable) waste. Urban domestic trash production amounts to 100 million tons.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was ratified in 1991.

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## CHAPTERS 20 TO 22: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS, SOLID AND RADIOACTIVE WASTES

### Decision-Making:

*Hazardous wastes:* The Ministry of the Chemical Industry is the responsible national level agency dealing with toxic chemicals overall policy and management. The National Environmental Protection Agency is responsible for the legislation under the Solid Waste Act which comprises the management of hazardous and dangerous wastes disposal. The National Environmental Protection Agency is also responsible for environmental impact assessment concerning projects that generate hazardous products. Environmental inspection for the safe disposal of hazardous waste is a joint effort between NEPA and other relevant ministries. Other than the government, the Chinese Research Academy for Environmental Sciences is the national level research body for the technical solution of waste disposal problems. In each province, there are research institutes responsible for developing or adopting safe solid waste methods and technologies.

*Solid wastes:* In October of 1995, China promulgated the Law on the Prevention and Control of Environmental Pollution by Solid Waste. This law has brought the control of solid waste (especially hazardous waste) into the legal structure.

*Radioactive wastes:* The State Bureau of Nuclear Safety is responsible for safe management and disposal of radioactive wastes. Under China's governmental structure, the State Bureau of Nuclear Safety is affiliated with the State Science and Technology Commission of China. In 1992, the Chinese Government promulgated China's Environmental Policy on the Disposal of Middle- and Low-Level Radioactive Waste.

### Programmes and Projects:

*Hazardous wastes:* No information available.

*Solid wastes:* No information available.

*Radioactive wastes:* A model plant is under construction for the disposal of radioactive wastes from the Daya Bay Nuclear Power Plant.

### Status:

*Hazardous wastes:* China is currently in a pilot phase, introducing legislation of solid waste disposal, landfill and incineration facilities. Due to its large cost, advanced technologies for burial or burning the waste may not be suitable for dissemination until the future. A joint cooperation to develop out suitable technologies based on cost-effective analysis for safe disposal of solid waste is strongly recommended by local governments in China. In some pilot localities, such as Hangzhou and Shengzheng cities, low cost landfills are now under construction.

*Solid wastes:* No information available.

*Radioactive wastes:* Examination of the operation of the Qinshan and Daya Bay Nuclear Power Plants has shown that the land gamma radiation levels around the plants and the radioactive elements in soil, water, air-dissolved matter, sediment, and biological samples are all within the data scope.

### Capacity-building, Education, Training and Awareness-Raising:

*Hazardous wastes:* No information available.

*Solid wastes:* No information available.

*Radioactive wastes:* No information available.

### Information:

*Hazardous wastes:* No information available.

*Solid wastes:* No information available.

*Radioactive wastes:* No information available.

### Research and Technologies:

*Hazardous wastes:* The mechanisation level for waste collection and treatment is low. Equipment is obsolete and not suitable for the task. The scientific and technological level of waste treatment and disposal is in urgent need of improvement.

*Solid wastes:* In order to identify the variety, characteristics, quantity, and pollution situation of solid waste (especially the hazardous types), find out major sources of pollution, and to promote waste utilisation and

disposal, China has conducted experiments of solid waste registration in 17 cities, including Nantong, Jinan, Shenyang, and Shanghai since 1992.

*Radioactive wastes:* No information available.

**Financing:**

*Hazardous wastes:* No information available.

*Solid wastes:* No information available.

*Radioactive wastes:* No information available.

**Cooperation:**

*Hazardous wastes:* Active cooperation with international companies has been carried out with regard to waste collection and treatment. More such cooperation is expected to introduce or jointly develop suitable technologies for China.

*Solid wastes:* No information available.

*Radioactive wastes:* No information available.

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## CHAPTERS 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

**Women:** Decision-making: The participation of women in sustainable development is addressed in China's Agenda 21. Policies or strategies for achievement of equality in all aspects of society have been drawn up and completed. Mechanisms are in place to assess implementation and impact of development and environment policies and programmes on women. The All China Women's Federation has been involved in the process of formulation and implementation of China's Agenda 21 and its associated priority programmes. Status: Chinese women have taken an active part in the adoption of sustainable practices with concrete results and Chinese women's organisations have also made substantial contributions to protecting the environment. Capacity-Building, Education, Training and Awareness-Raising: In Benxi City a Women's Sustainable Development Centre was set up that disseminates knowledge to rural women and helps urban women to start new careers. Curricula and educational material already promote gender-relevant knowledge. Cooperation: The Convention on the Elimination of All Forms of Discrimination Against Women was signed on 17 July 1980 and ratified on 4 November 1980.

**Children and youth:** Decision-making: China's Agenda 21 identifies targets and activities in order to promote the participation of children and youth in sustainable development. An Outline of China's Development Programme for Children in the 1990s has been promulgated. Children and Youth have been involved in the process of formulation and implementation of the sustainable development strategy in China. Status: The goal, set in Agenda 21, of ensuring that by the year 2000 more than 50% of youth -gender balanced- have access to appropriate secondary education or vocational training has been reached. Urban youth unemployment has increased from 2.988 million in 1992 to 3.102 million in 1995.

**Indigenous people :** No information available.

**Non-governmental organisations :** Decision-making: Mechanisms exist already that allow NGOs to play their partnership role responsibly and effectively and NGO inputs are important.

**Local authorities:** Decision-making: The Government supports Local Agenda 21 initiatives and there are at least 21 Local Agendas 21. Women and youth fully participate in local decision-making. Status: China is a vast country and there are great disparities between the eastern, central, and western parts of the country in terms of natural conditions, economic development, and urbanisation. In view of this, it is essential for China to formulate different action plans for sustainable development which are suited to the local situations and conditions. By the end of 1996, two-thirds of the 30 provinces, autonomous regions, and municipalities had organized their respective Leading Groups and established working offices to implement their Local Agenda 21. Some provinces have formulated their own Local Agenda 21s and action plans. Some cities have also initiated their Local Agenda 21 works.

**Workers and trade unions:** Decision-making: Workers take full part in National Agenda 21 discussion and implementation. China's Agenda 21 identifies targets and activities in order to promote the participation of workers and labour unions in sustainable development. Status: The trade unions of China have the largest membership in the world, with more than 600,000 grassroots organisations and over 100 million members.

**Business and industry:** Decision-making: There are governmental policies encouraging increasing the efficiency of resource use, including reuse, recycling, and reduction of waste per unit of economic output. Several big enterprises and a few small and medium sized enterprises have adopted sustainable development policies. Programmes and Projects: In 1994, the Technical and Financial Enhancement Programme was initiated by the Chinese Government. The aim of this programme is to enhance technical reform investment, accelerate enterprise reform, and set up technical progress mechanisms. In two separate steps more than 3,000 projects within the Technical and Financial Enhancement Programme have been arranged, with a total investment of RMB 290 billion yuan. Energy conservation and reduction, comprehensive utilisation of resources, and environmental protection are three of the key priority areas within this programme. There are over 232 projects in the above areas and the total input is RMB 30 billion yuan. 30.c increasing number of enterprises that subscribe to and implement sustainable development policies.

**Scientific and technological community:** Decision-making: Chinese scientists and technologists have taken an active part in implementing sustainable development. The Chinese Science and Technology Society has more than 10,000 branches at the provincial and prefectural levels, about 50,000 township offices, and 2,000 community groups. The people in this circle are all working diligently and conscientiously to gear their endeavours to economic construction and social progress, propagate advanced technologies where applicable to the local conditions, advocate civilised, healthy and scientific ways of living, eliminate feudal superstitions and ignorance, and promote the concept of sustainable development.

**Farmers:** Decision-making: Farmer participation is essential for the cost reduction of the country's environmental control projects. Their input enables the Central Government to work on many projects with limited investment. Chinese farmers have developed many new methods in their practice of enhancing the agricultural ecological environment, such as eco-farming and comprehensive control of small drainage areas. In addition, they have been actively studying and practising the application of new technologies in their efforts towards sustainable development. This is illustrated by the fact that over 30 million person-hours have been spent by farmers attending training courses on various applied technologies. The flourishing of township and village enterprises is another major contribution of the Chinese farmers towards the national industrialisation. This sector provides 120 million non-farming job opportunities in the rural areas and has created substantial wealth. These enterprises constitute a strong pillar of China's rural economy, an important part of the national economy, and the majority of the medium- and small-sized enterprises. Status: Farmers are the main agents of land control and, at the same time, the main beneficiaries of investment in land quality. In the water and soil control projects from 1991 to 1996, farmers provided 70% of the total input and completed work on the prevention of soil erosion in 211,300 square kilometres.

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## **CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS**

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

**Decision-Making:** China is in the transition period from a highly resource-consuming, low-efficiency, and heavily polluting economic development pattern to a resource-saving, high-efficiency, and less polluting economic development pattern. Therefore, all kinds of sciences and technologies which can promote the transformation of the economic development pattern are given priorities since there is still a shortage of these kinds of sciences and technologies in China. Revitalising China through science and education has served as a major strategy in China.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

**Decision-Making:** The Chinese Government attaches great importance to education on sustainable development. Under its auspices, several universities have set up new faculties, departments or colleges of environment protection, and preparations are also being made for the establishment of other academic organisations (such as research centres, societies, and research institutes) which specialise in the research of sustainable development. Moreover, environment sections have been added to textbooks for primary and middle schools, with the aim of enhancing the young people's environmental awareness.

Chinese women's organisations at different levels play a very important role on the promotion of women's education level in China. Many kinds of training courses and programmes on practical technologies and illiteracy-elimination have been conducted by them. The China Youth Fund launched and implemented the Hope Project which was designed to mobilise the entire society to help the young dropout in the poverty-stricken regions. The Labour Unions give full support to on-the-job training for employees of enterprises.

**Programmes and Projects:** Since the UNCED, and particularly after the publication of China's Agenda 21, the Chinese Government, at all levels, has organised numerous training courses in various forms. These were intended to change the out-dated traditional development concepts of the decision-makers and the management of development, and to enrich their understanding of sustainable development. By the end of 1996 these sustainable development training courses had been conducted in over half of the provinces. Six training workshops were devoted to the implementation of China's Agenda 21 into its social and economic development plans with support of UNDP and UNIDO.

**Status:** The enrolment rate of school age children in China has increased greatly. The 1996 enrolment rate of school-aged children soared to 98.8%, the enrolment rate of middle-school aged children rose to 82.4%, and the percentage of illiterate and semi-illiterate people dropped from 22.27% in 1990 to 16.48% in 1996. In the past ten years, China has seen rapid development in vocational education. By 1996, there were 10.1 million students attending various vocational schools of the high-school level, and there were more middle-school graduates attending vocational schools than high-schools. In recent years, more than 50 million people have received vocational technical training each year. China has established a complete higher education system for both youths and adults. By 1996, there were over 2,170 institutions of higher education (1,032 for youth, 1,138 for adults) with 5.675 million registered students. This was a 52.2% increase from the 3.729 million students registered in 1990.

**Capacity-building, Education, Training and Awareness-Raising:** The Chinese media has greatly supported training and education for sustainable development. The People's Daily, CCTV, and the Central People's Radio have given broad coverage and introductions to the concept of sustainability and Agenda 21. Beijing TV produced China's Agenda 21 Is Not A Dream (a 30-episode series) and Sustainable Development: A New Start for China. These programs offer a systematic introduction to China's Agenda 21 and the concept of sustainable development. The Central People's Broadcasting Station aired the series The Road of China's Sustainable Development. Recent years have witnessed extensive coverage of environmental protection activities by the media, massive publication of books and periodicals on sustainable development by publishing agencies, and numerous important meetings on sustainability by the Government at all levels.

To increase public awareness of natural resources, the environmental situation, recycling, and solid and hazardous waste treatment, the State Economic and Trade Commission, the Environment and Resources Committee of the National People's Congress, and the Publicity Department of CPC's Central Committee co-organised a publicity campaign on the topics of sustainable utilisation of natural resources, promotion of the transformation of economic development growth model from extensive to intensive, and promotion of sustainable development. This activity is of great concern to the entire nation. All of the news agencies were mobilised to promote this campaign and thus increase public awareness on these topics. This campaign will be continuously conducted during the Ninth Five-Year Plan period. Additionally, during the Eighth Five-Year Plan, the State Economic and Trade Commission, the State Planning Commission, the State Science and Technology Commission, and other ministries conducted week-long campaigns on the topic of energy conservation across the whole country every October. The Ministry of Natural Resources organises relevant sectors to hold the World Water Day and China's Water Week every year.



**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## **CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES**

The issue has been covered either under Chapter 2 or under the heading **Cooperation** in the various chapters of this Profile.

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## **CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS**

The issue deals mainly with activities undertaken by the UN System.

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## **CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS**

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-Building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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## CHAPTER 40: INFORMATION FOR DECISION-MAKING

**Decision-Making:** The Administrative Centre for China's Agenda 21 is responsible for exchange of information on all issues related to sustainable development.

**Programmes and Projects:** China's Sustainable Development Networking Programme has been developed in order to improve access to information, and a Local Area Network with interconnection to the Internet is being completed. Further development of these networks is planned.

**Status:** The need for improvements of communication technologies is expressed in Chapter 12: Sustainable Development of Industry, Transportation and Communication in China's Agenda 21. The present capacity in telecommunication is inadequate. Delays in the transfer of information hinders social and economic sustainable development.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** Various government agencies and different localities have established information centres and the State has set up a broad-based information centre. These provide a foundation for the development of an information system for sustainable development.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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**CHAPTER: INDUSTRY**

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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**CHAPTER: SUSTAINABLE TOURISM**

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** No information available.

**Capacity-building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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