# SCIENCE POPULARIZATION REPORT OF CHINA

2008

CONCISE EDITION



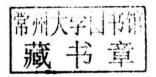




# SCIENCE POPULARIZATION REPORT OF CHINA 2008

(CONCISE EDITION)

CHINA RESEARCH INSTITUTE FOR SCIENCE POPULARIZATION



POPULAR SCIENCE PRESS
BEIJING

#### 图书在版编目(CIP)数据

2008 中国科普报告: 英文版 / 中国科普研究所编. —北京: 科学普及出版社, 2009. 6 ISBN 978-7-110-07105-2

Ⅰ. 2… Ⅱ. 中… Ⅲ. 科学普及 - 研究报告 - 中国 -2008 - 英文 Ⅳ. №中国版本图书馆 CIP 数据核字(2009)第 073876 号

自 2006 年 4 月起本社图书封面均贴有防伪标志,未贴防伪标志的为盗版图书。

责任编辑:单亭张莉

封面设计: 贾豪俊

责任校对: 林 华

责任印制: 李春利

#### 科学普及出版社出版

北京市海淀区中关村南大街 16 号 邮政编码: 100081 电话: 010-62179148 传真: 010-62183872 http://www.kjpbooks.com.cn 科学普及出版社发行部发行 北京时捷印刷有限公司印刷

开本: 787毫米×1092毫米 1/16 印张: 6.25 字数: 200千字 2009年6月第1版 2009年6月第1次印刷 ISBN 978-7-110-07105-2/N•121 印数: 1-500册 定价: 38.00元

#### Chairman of Editorial Board: Xu Shanyan

#### **Members of Editorial Board:**

Wang Chunfa Ding Ying Wang Ke Wang Yanhu Wang Yusheng Wang Huimei Niu Lingjiang Bian Jieguang Ren Lin Ren Fujun Liu Xiaohang Liu Bixiu Yang Wenzhi Li Shi Ji Shaoqin Sun Dongsheng Wu Yangjie Qiu Chengli Shen Aimin Zhang Xiaolin Xu Yanhao **Zhang Guoping** Zhang Bin Meng Xianping Yin Hao Gao Kan Cui Jianping Peng Youdong Yan Shi

Editor in Chief: Ren Fujun Lei Qihong

Executive Editor in Chief: Zhang Hongye

#### **Executive Editors:**

Zhong Qi Wang Baohua Zhang Zhimin Zhu Hongqi Wang Lihui

Contributing Translator: Yu Qiyu

## Task Group of "Science Popularization Report of China (2008)"

Head of the Group: Lei Qihong

**Executive Head of the Group:** Zhang Hongye

Deputy Executive Head of the Group: Zhong Qi

#### **Members of the Group:**

Wang Wenxian
Wang Xinhua
Niu Gang
Xu Qing
Li Sen
Zhang Zhimin
Chen Ling
Meng Xiong
Huang Xiaohui
Zhai Tao

Wang Wenjing
Wang Baohua
Kang Kuanying
Yang Huili
Xiao Xianjing
Zhang Jia
Chen Hui
Zhao Lixin
Cao Yanlei
Yan Yan

Wang Lihui Wang Shu Tian Qihong Yang Lijun Tong Hefeng Zhang Chao Chen Weixiao Hu Junping Han Zhaokuan Wang Yan
Wang Xiaoli
Zhu Hongqi
Li Daguang
Zhang Shoushen
Zhang Bohao
Qu Lulu
Gao Hongbin
Zhan Yan

为试读,需要完整PDF请访问: www.ertongbook.com

## **Preface**

Science Popularization Report of China 2008 is the seventh edition of the science popularization report organized, studied and compiled by the Research Institute for Science Popularization, which gives a description to the situation of the science popularization work in the year of 2007. The English edition is an abridged version of the Chinese original.

Since starting the study and compilation of China's first science popularization report "China Science Popularization Report 2002" in 2001, this task group has carried out all round study and sustained tracking on the situation of China's science popularization, kept the record of the major science popularization activities and the development of science popularization in various fields through "China Science Popularization Report", and made some qualitative and quantitative analysis and comparison.

To recollect the course of China's science popularization in the past eight years, it can be told that China's science popularization undertaking has been situating in the

stage of the rapid socio-economic, scientific and technological development of the country. The economic development has laid a solid foundation for the development of science popularization undertaking, the science and technology progress has become the inexhaustible source of science popularization, and the all round social development of China has brought about an important opportunity for the development of science popularization undertaking. In the meantime, China's science popularization has been ever more merging with international scientific and technological communication, and the influence of the accomplishments and experiences of China's science popularization has gradually expanded in the world scientific and technological communication community. It can be said that "science popularization is rejuvenating in times of prosperity."

In 2007, some new characteristics appeared in China's science popularization undertaking: the "national science popularization capacity" construction was put onto an important position in national scientific

and technological development and public service of science and technology. The government departments had issued a series of science popularization policies, and the construction of science popularization resources, the prosperity of science popularization creation and the construction of the ranks of science popularization, etc., had been attached with unprecedented attention. It means that the science popularization service as public facility of the country will be further improved, and the ordinary public of China will have the access to more convenient science and technology service with higher quality.

The value of China science popularization report as a research document lies in

its objective record and analysis of the circumstances of the development in China's science popularization field annually, and its correct refinement of the features of the annual science popularization work. The compilers of the science popularization report come from different departments, organizations and institutions, but all of them adhere to the common principle of scientific strictness and seeking truth from facts. We will continue to compile and publish the annual science popularization report and its English version. We wish to carry out extensive exchange with the researchers and practitioners of various countries on science communication.

Task Group on China's Science Popularization Report

December 16, 2008

ization Capacity"

## **Contents**

Part Three:Science Popularizatio	Preface
Facing Key Groups of People Science Popularization Facing the Juve nile Science Popularization Facing the Farmers 34-39 Science Popularization Facing the La	Part One: Summary  To Strengthen the Construction of Na- ional Science Popularization Capacity, o Promote the Development of Science Popularization Undertaking  3-16
boring Population in Towns and Cities 40-42	Part Two: Policy Environment 17 The Newly Revised "The Law of the People's Republic of China on Science
<ul> <li>Part Four: Science Popularization</li> <li>Capacity Construction</li> <li>Books of Science Popularization</li> </ul>	and Technology Progress" Attaches Attention to the Development of China's Science Popularization Undertaking
<b>45-5</b> ° Films and TV of Science Popularization <b>52-5</b> °	19-21 The Program of "Benefiting the Farm-
Internet Science Popularization 57-60	ers and Rejuvenating the Countryside hrough Science Popularization" Has Been Written in the 2007 No.1 Docu-
Museums of the Category of Natura Science 61-69 Science Popularization Gallery 66-70	nent of the Central Committee of CPC and the State Council <b>22-24</b>
Part Five: Major Science Popular ization Activities	Eight Government Departments Jointly Promulgated "Several Opinions Regarding the Strengthening of the Con-
National Science and Technology Week	struction of National Science Popular-

25-26

Hand in Hand to Construct An Innova-

tion-oriented Country **73-74**National Science Popularization Day:
Conservation of Energy and Resources, Protection of Environment, Assurance of Safety and Health

75-76

The Public Science Day of Chinese Academy of Sciences: To Promote the Construction of An Innovation-oriented Country by Science and Technology

77-78

Series Activities of National Vocational
Skill Contest 79-80
Chinese Young Workers' Skill Month

81-82

The Activity of the Second Nationwide

Appraisal of Excellent Technical Innovation by Workers and Staff 83-84 Youth and Teenagers' Scientific Investigation Activity: Water Conservation Is around Us 85-86 To Reiuvenate the Old Revolutionary Base Area, to Serve for Agriculture, the Countryside and the Farmers: The Trip of Science and Technology Train to **Dabie Mountains** 87-88 "Chang'e" Lunar Exploration Triggered the Outer Space Science Popularization Fever 89-90 Science Popularization Activity on Energy Conservation and Emission Reduction 91-92

## PART ONE SUMMARY



# To Strengthen the Construction of National Science Popularization Capacity, to Promote the Development of Science Popularization Undertaking

China has all along attached great importance to the popularization of science and technology. Since the reform and opening up, the State has successively promulgated "Several Opinions Regarding the Strengthening of Science and Technology Popularization Work", "The Law of the People's Republic of China on Popularization of Science and Technology" (to be referred to as Science Popularization Law hereinafter), and formulated "Outline of the National Scheme for Scientific Literacy (2006–2010– 2020) " (to be referred to as The Outline for Scientific Literacy hereinafter). In "The Law of the People's Republic of China on Science and Technology Progress" (to be referred to as Science and Technology Progress Law hereinafter) and "The Outline of the National Program for Long-and-medium-term Science and Technology Development (2006 - 2020)" (to be referred to as the Outline of Long-and-medium-term Science and Technology Development hereinafter), the popularization of science and technology has been taken as the important content of scientific and technological development in China. All these have greatly promoted the development of China's science popularization undertaking.

On January 17 of 2007, eight Government departments, including the Ministry of Science and Technology, the Department of Propaganda of the Central Committee of CPC, the National Development and Reform Commission, the Ministry of Education, the Commission of Science and Technology for National Defense Industry, the Ministry of Finance. China Association for Science and Technology, Chinese Academy of Sciences, jointly promulgated "Several Opinions Regarding the Strengthening of the Construction of National Science Popularization Capacity" (to be referred to as Opinions on Science Popularization Capacity Construction hereinafter), which takes the strengthening of the construction of the national science popularization capacity as strategic mission of major importance in strengthening the

## SCIENCE POPULARIZATION REPORT OF CHINA 2008(CONCISE EDITION)

construction of an innovation-oriented nation, and lays out the chief missions of strengthening the construction of national science popularization capacity during the period of the 11th Five-Year Plan.

Strengthening the Construction of National Science Popularization Capacity Is the Driving Force for the Development of Science Popularization Undertaking

The popularization of science and technology is a public benefit undertaking, and a long term mission, while the national science popularization capacity is the foundation of the development of science popularization undertaking, and the assurance for the sound development of the science popularization undertaking, which is able to provide powerful driving force and support for the development of science popularization undertaking. It has become a pressing mission for strengthening the construction of the national science popularization capacity.

1. Science Popularization Undertaking Has Been Included in the Overall Planning of National Economic and Social Development

In 2002, China promulgated "Science Popularization Law", which marked that China's science popularization work was coming to a new stage of legalization, normalization and socialization. It was explicitly set forth in the "Science Popularization Law" that "the popularization of science is a public benefit undertaking, and the development of science popularization undertaking is a long term mission of the nation".

The Outline for Scientific Literacy promulgated in 2006 made further specific layout for the development of China's science popularization undertaking, and laid out the planning for the development of science popularization during the period of the 11th Five-Year Plan.

The "Science and Technology Progress Law" newly revised in 2007 had clarified the positioning of science popularization undertaking from legalist angle: "The State will develop the science and technology popularization undertaking, to popularize the knowledge of science and technology and enhance the scientific and cultural literacy of all citizens."

The "Science Popularization Law" and the "Outline for Scientific Literacy", as well as the "Science and Technology Progress Law" had provide the norms, from the legal and State tenets, in respect to the nature, contents, organizational management, social responsibilities, and measures of assurance, etc., of science popularization. They had also provided a unified layout and planning to intensify the resource mobilization



## PART ONE SUMMARY

capability and the overall coordination and socialization of the science popularization undertaking, as well as laid stress on the establishment of a sound operational mechanism. All these have played an extremely important role in mobilizing the social forces and integrating the social resources to form a pronounced situation of making the whole society be able to jointly participate, to give support and to carry out science popularization.

Above all, the science popularization undertaking has been included in the overall planning of the national economic and social development, as well as in the working agenda of the Party and the State. An institutional system of the leadership and organizational management system of science popularization has been established, with the State Council and the local Party and administrations at various levels as the leadership and the relevant administrative departments, the relevant social undertakings and the relevant people's organizations such as the association of science and technology at various levels as the main body. A new working system has been formed under the closely coordination, broad unification and broad collaboration between the Party, the Government, the people's organizations and the scientific and technological units. It marks that China's science popularization undertaking has come to a new historic stage of Government's promotion and the whole people's participation.

#### 2. The National Science Popularization Capacity Construction Is the Driving Force of the Development of Science Popularization Undertaking

The national science popularization capacity indicates to the comprehensive strength of a country in providing the public with science popularization products and services. It mainly includes the science popularization creations, science and technology communication channels, science education systems, social organizational networks of science popularization work, the ranks of science popularization talents, as well as the government's macro-management over science popularization work, etc..

## "Opinions on Science Popularization Capacity Construction" stresses on:

The capacity in mobilizing the social resources of science popularization, the integration of the advantages of the government departments, various social undertakings, various social organizations and enterprises, to promote the collaboration between the scientific community, educational community and the mass media;

To lay emphasis on the structuring of a

## SCIENCE POPULARIZATION REPORT OF CHINA 2008(CONCISE EDITION)

platform for innovation and sharing of science popularization resources;

To pay concern to the establishment of a long term effect mechanism of rural science popularization and urban community science popularization;

To encourage the development of the operational cultural industry of science popularization, in order to prosper the popular science creation and enhance China's creative capability in popular science works;

To strengthen the public science and technology communication system and the construction of the infrastructure of science popularization, in order to build up broader science and technology communication channels;

To improve the secondary and primary school science education system, in order to upgrade the science education level;

To improve the communication mechanism between the government and the society, in order to promote public understanding of science and public participation in scientific and technological decision making;

To strengthen demonstration and guiding, to further enhance the social mobilization capability of science popularization work;

To combine the efforts of both professional and part time workers, to build up a ranks of high quality science popularization talents.

In the "Opinions on Science Popularization Capacity Construction", the concept of the socialization of science popularization undertakings is embodied everywhere. It stresses much more on the construction of various management and working systems, in order to ensure the formation of a sound operational mechanism, to enable the sound development of the sustaina-bility of the science popularization under-takings.

Above all, the construction of the national science popularization capacity is proceeding from the development of the science popularization undertakings, paying concern to the system construction, laying emphasis on the promotion of the reform of institutional system and mechanism of the science popularization undertakings, on the strengthening of the sustainable development capability of the science popularization undertakings, stressing on the enhancement of the quality of the science and technology popularization work and the establishment of a long term effect operational mechanism, and all these are focusing on the establishment of a sound mechanism for the development of China's science popularization undertaking.

To Implement the "Outline for Scientific Literacy" in A Deep Going Way, to Strengthen the Construction of the National Science Popularization Capacity, and to Seize the Right Momentum to Bring



## PART ONE SUMMARY

## Forward the Science Popularization Undertakings in 2007

In 2007, under the promotion of the "Outline for Scientific Literacy" and "Opinions on Science Popularization Capacity Construction", distinct advance had been obtained in various aspects of national science popularization capacity, either from the formulation of science popularization policies down to the input of science popularization funds, or from the mobilization of social resources of science popularization down to the construction of science popularization infrastructure.

1. Policies at Various Tenets Promulgated Successively to Build up a Sound Social Environment for the Development of Science Popularization undertakings

In 2007, the relevant Government departments formulated and promulgated a series of policies from various tenets and angles, with the contents covering the construction of science popularization capacity, science popularization planning, science popularization activities and science popularization awarding and commendation, etc.. It can be seen from these policies that the State is laying special emphasis on the strengthening of the construction of science popularization capacity, the increase of the intensity on rural science

popularization, and paying special attention to science popularization on how to meet emergency, and in the meantime, it also reflected that science popularization has gradually merged into works in various trades and professions.

(1) The Promulgation of "Opinions on Science Popularization Capacity Construction", to Ensure the Development of Science Popularization Undertakings

"Opinions on Science Popularization Capacity Construction" jointly promulgated by the eight Government departments was the most important special science popularization policy promulgated by the Government in 2007. It was the first time that the Government explicitly demanded to strengthen the construction of science popularization capacity in the form of a special document. It is not difficult to see that China has raised the strengthening of national science popularization capacity onto a strategic height. Also, each of various departments has promulgated policy measures in respect to science and technology communication, the construction of the science popularization organizational ranks, the construction of science popularization infrastructure, as well as science popularization awarding, etc., to promote the construction of the science popularization capacity and the assurance of the sound

### SCIENCE POPULARIZATION REPORT OF CHINA 2008(CONCISE EDITION)

development of science popularization undertakings.

(2) To Strengthen the Rural Science Popularization, to Promote the Construction of the New Socialist Countryside

It was put forward in the 2007 No. 1 Document of the Central Committee of CPC and the State Council "Several Opinions on the Central Committee of CPC and the State Council Regarding Actively Developing Modern Agriculture and Firmly Advancing the Construction of the New Socialist Countryside" that it is necessary "to enlarge the scale of the new type farmers' training projects and the program of benefiting the farmers and rejuvenating the countryside through science popularization". It is fully demonstrated how the State is paying attention to the strengthening of rural science popularization that "benefiting the farmers and rejuvenating the countryside through science popularization" as a special program is explicitly written in the No. 1 Document of the Central Committee of CPC and the State Council.

In addition, targeting at the rural science popularization and the construction of the new socialist countryside, various departments have promulgated a large number of documents. Among them, "The Outline of the Farmers' Scientific Literacy Education", as one of the guiding policy documents on the

farmers' scientific literacy education during a considerable longer period of time in the future, has made detailed policy stipulations on the farmers' scientific literacy education, and put forward a normalized rural scientific and technological training system.

(3) To Pay Attention to Science Popularization for Meeting Emergency, to Pay Concern to Public's Safety and Health

In recent years, the State has gradually strengthened the education on disaster prevention and alleviation and the science popularization work for how to cope with the explosive public accidents. "The Law of the People's Republic of China on Emergency Response" adopted on August 30, 2007 was the first time for the State to normalize the tackling of explosive accidents in legislative form, which has provided the science popularization on explosive accidents with a legal basis. The governments at various levels have issued corresponding documents to strengthen the publicity and education in respect to emergency response, while various departments have also formulated a series of measures on the response to explosive accidents in respect to natural disaster, hygiene, diseases and food safety, to popularize the related scientific knowledge, to enhance the public's consciousness on disaster prevention and alleviation, and to strengthen

