

新世纪的展望——中国人口资源环境与可持续发展科普丛书

The New Century Prospect ——

Scientific Educational Monograph On Population, Resources,
Environment and Sustainable Development in China

丛书主编 沈益民 丛书副主编 岩 流

可持续发展新方略

New Strategy for Sustainable Development

岩 流 主 编



中国大地出版社

中国可持续发展战略研究

The New Strategy Program

Global Sustainable Strategy for Rapidly Growing
Economies and the Sustainable City

2000 2001 2002 2003 2004

可持续发展新方略

New Strategy for Sustainable Development

王 强 主编



中国出版集团

新世纪的展望——中国人口资源环境与
可持续发展科普丛书

The New Century Prospect——

Scientific Educational Monograph on Population, Resources,
Environment and Sustainable Development in China

丛书主编：沈益民 丛书副主编：岩 流

可持续发展新方略

New Strategy for Sustainable
Development

岩 流 主 编

中国大地出版社

· 北 京 ·

内 容 提 要

本书阐述了 21 世纪可持续发展的新方略, 提出要用可持续发展生产力的新概念, 深化改革传统的不可持续的生产力发展方式, 重新创造一个可持续发展生产力的新模式。

图书在版编目 (CIP) 数据

可持续发展新方略/岩流主编. —北京: 中国大地出版社, 2002.8

(新世纪的展望: 中国人口资源环境与可持续发展科普丛书/沈益民主编)

ISBN 7-80097-474-X

I. 可... II. 岩... III. 人口—关系—可持续发展—发展战略—中国 IV. X24

中国版本图书馆 CIP 数据核字 (2002) 第 039958 号

责任编辑: 程 新

出版发行: 中国大地出版社

社址邮编: 北京市海淀区大柳树路 19 号 100081

电 话: (010) 62183493 (发行部)

传 真: (010) 62183493

印 刷: 北京地大彩印厂

开 本: 850mm×1168mm $1/_{32}$

印 张: 6.5

字 数: 163 千字

版 次: 2002 年 8 月第 1 版

印 次: 2002 年 8 月第 1 次印刷

印 数: 1~600 册

书 号: ISBN 7-80097-474-X/G·84

定 价: 80.00 元 (全四册)

(凡购买中国大地出版社的图书, 如发现印装质量问题, 本社发行部负责调换)

新世纪的展望——中国人 口资源环境与可持续 发展科普丛书

丛书顾问：

曲格平 朱之鑫 蒋承蓉

王国强 陆学艺 李宏规

丛书主编：

沈益民

丛书副主编：

岩 流

序

20 世纪是一个伟大的世纪。在这个世纪里，生产力和科学技术取得了惊人的发展，人类创造了前所未有的物质财富，加速了文明发展的进程。但是，与此同时，人口剧增，畜牧超载，消费过度，尤其是工业化过程中的处置失当，不合理地开发利用自然资源，造成生态环境严重恶化，使人类尝到了大自然惩罚的苦头：黑烟浊水，公害事件频发，植被破坏，水土流失，飞沙扬尘，水旱灾害加剧，物种锐减，臭氧层损耗，危险废物扩散和全球变暖……环境污染和生态破坏，发展到从根本上破坏了生态系统的结构和功能，使一些江河源头和重要生态功能区遭受破坏和失去生态平衡。人类从自然的奴隶，发展成主宰自然的主人，而又遭受着自然界无情的惩罚。面对日益加剧的公害和环境危机，到 20 世纪下半叶，人类逐渐认识到工业化发展过程中存在的缺陷和问题，醒悟到必须走一条人口、资源、环境相互协调、良性循环的可持续发展的道路。认识到人不仅是人类社会的生产者和消费者，不仅要学会高效利用自然资源，人还要成为人与自然的协调者，成为生态系统乃至地球利益的代表者。

本丛书的主标题是《新世纪的展望》，就是从中国人口、资源、环境与可持续发展的角度来阐述 21 世纪初期中国的国情，展望 21 世纪如何走出一条人口、资源、环境良性发展的道路，目的是向广大读者传播有关这一方面的科普知识。丛书共分四册，第一册为 15 亿人口的挑战，第二册为国土资源开发利用，第三册为环境危机与环境保护，第四册为可持续发展新方略。丛书的内容，既深入浅出地介绍了人口、资源、环境和可持续发展

的有关知识，还运用中国东部地区经济建设、资源开发与环境保护方面的实例，对西部大开发作了展望。丛书的编写，恰逢中国于2000年进行了第五次人口普查，新的人口数据，有利于作为对新世纪展望的依据。这套丛书，内容丰富，资料翔实，数据较新，并进行了必要的理论探讨，对于从事人口、环境、国土资源和经济、社会研究的科研工作者，学校教师，城乡企业乃至政府工作者，都有很好的参考价值。

本丛书的出版，得到福特基金会和中国国际技术交流中心的帮助和赞助，特此鸣谢。我们要感谢全国人大环境与资源保护委员会、国家统计局、国土资源部、国家计生委以及中国社会学会、中国人口学会等有关部门和学术团体的领导对本丛书的支持并担任顾问，感谢国土资源部原副部长蒋承崧同志为本丛书审稿，感谢联合国统计司原高级官员游允中博士为本丛书序言和各书目录英文稿所作的审改。

在《中华人民共和国人口环境与可持续发展地图集》的基础上，中国社会学会人口与环境社会学专业委员会和中国人口学会人口与资源、环境专业委员会共同组织了一批对这方面有研究的专家学者对此作了进一步的探讨。本丛书是他们的心得体会和研究成果的结晶。不妥之处，热忱欢迎广大读者批评指正。

沈益民

2002年5月于北京

Foreword

The twentieth century was a great century. In that century, there was tremendous development in productivity, science and technology. Human beings have created enormous material wealth that they had never had before and which have helped to accelerate the advancement of civilization. However, at the same time, the increase of population, over grazing, over consumption, and particularly the mismanagement in the process of industrialization and the irrational utilization of natural resources have caused serious ecological – environmental degradation. For these, men were punished by the nature. Smog, smoke and water pollution have increased, plant covers were destroyed, water and soils were lost, sandstorms, floods and droughts have occurred more frequently, many species have disappeared, the Ozone layers have been depleted, poisonous materials are spreading and the globe is warming. Environment pollution and ecological degradation have begun to destroy fundamentally the structure and function of the ecological system. These have ruined some of the major riverheads and important ecological function areas and the ecological balance was lost. At the beginning, human beings have freed themselves from being the slaves of the nature and made themselves the master of the universe, but then were punished ruthlessly by the nature for their carelessness. In the second half of the 20th century, confronting with the increase of natural disasters and environmental crises, human beings have learned gradually the limi-

tation and problems in industrialization. They have realized the importance of coordination and harmonization among population, resources and the environment. They have learned that not only they are producers and consumers in the society and should know how to efficiently make use of all natural resources, but also they should become the coordinator between man and nature. Human beings are the representatives of the ecological system and represent the interests of the earth.

This monograph series, "The New Century Prospect" presents population, resources, environment and sustainable development of China at the beginning of the 21st century and how she may develop her population, resources and environment along a sound and correct road. It aims at informing readers basic scientific knowledge in these fields. The series has four volumes: Volume I—Challenge to the 1.5 Billion Population; Volume II—Development and Utilization of Land Resources; Volume III—Environmental Crisis and Protection and Volume IV—New Strategy for Sustainable Development. The monographs present the rich knowledge on population, resources, environment and sustainable development in a simple way and illustrate with examples of the economic reconstruction, resources development and environmental protection in the eastern part of China while looking at future prospects in the western part of the country. Since China has conducted her fifth population census in 2000, the new population data are important basis for the understanding of the new century. This monograph series is so rich in its content and uses the latest data; it is a valuable reference for those engaged in population, environment, and resources researches as well as for schoolteachers, urban and rural entrepreneurs and gov-

ernment workers.

Special thanks are given to the Ford Foundation and the China International Center for Economic & Technical Exchanges for their support and assistance in the publication of this monograph series. Appreciation is also given to the Committee for Environment and Resources Protection in National People' s Congress, the National Bureau of Statistics, the Ministry of Land Resources, the State Family Planning Commission, the China Sociological Association, the China Population Association and other academic groups for their support. Some of the leading members of the above organizations have very kindly served as advisors for this monograph series. A special thank goes to Mr. Jiang Chengsong, former Vice Minister of the Ministry of Land Resources for examining this series. Special thank also to Dr. Yeun-chung Yu, former Chief of Demographic and Social Statistics Branch, United Nations Statistical Division for examining and revising the English Foreword and Tables of Content.

The monograph series has its origin in a previous publication, "The Atlas of Population, Environment, and Sustainable Development of China". It is the further research product by a group scholar from the China Population and Environment Society of the China Sociological Association and the China Population, Resources and Environment Society of the China Population Association. Comments and suggestions about this monograph series are most welcome.

Shen Yimin
May 2002 in Beijing

前 言

在 20 世纪中，人类创造了无比辉煌的科技成就，这些成就从根本上改变了人类的生产方式和生活质量，也深刻地改变了人类传统的思维观念和对物质世界的认识，从而也极大地扭转了人类文明的发展导向。从这一点上说，在 20 世纪里人类最值得赞美的创造，并不是某一项科技成就，而是人类第一次从整体上进行了全面自我反思，认识到科技在飞速发展的同时，也给人类带来了许多难以解决的问题。所有的事情都有其两面性，所有的科学技术也都是“双刃剑”，不仅对社会生活是这样，对人类本身也同样存在着危害。整个人类从此第一次摆正了人与自然的关系统，也是第一次从意识上得到了解放。从根源上认识到了人类的自我繁衍，人类在推进经济建设和社会发展过程中，都不能超越自然资源与生态环境的承载能力，只有保证资源的永续利用和生态系统的良性循环，才是实现人类永世长存的首要条件。从这种意义上说，在 20 世纪里，人类终于取得了一个共识，真正弄明白了什么是人类应该追求的整体文明的最高标准，并把这种共识概括成一个新的文明词汇，叫做人类的“可持续发展战略”。实际上是“人类文明的新坐标”，也就是需要整个人类共同实施的“人类谋生的新方略”。

本书第一、二、七章由岩流编写；第三、四、五、六章由孙炳彦编写。全书最后由岩流统稿。

目 录

第一章 人类文明的新坐标	(1)
一、20 世纪的“黄牌警告”	(1)
二、一个新思维，解困全人类	(7)
三、当代文明的新坐标	(11)
四、中国人的必然选择	(17)
第二章 中华民族伟大复兴的新航标	(25)
一、生产力概念的新突破	(25)
二、自然规律的新理念	(32)
三、经济规律的新准则	(39)
四、科学技术的新导向	(47)
五、探索物质转化的新模式	(52)
六、国家安全的新概念	(57)
第三章 经济增长方式的大转变	(59)
一、完善社会主义市场经济体制	(59)
二、推进经济结构大调整	(61)
三、走生态经济型发展道路	(65)
四、在开发中保护，在保护中开发	(72)
五、清洁生产新模式	(77)
六、大力发展环保产业	(82)
第四章 深化农业技术革命	(85)
一、调整农业经济结构	(85)

二、用高科技发展生态农业	(89)
三、生态农业在我国的发展状况	(92)
四、生态农业的主要技术类型	(94)
五、创建有机食品基地	(99)
六、推进农村环境综合整治	(103)
第五章 实施西部大开发战略	(108)
一、保护和建设生态基础功能	(108)
二、退耕还林还草	(118)
三、建立长江黄河源头保护区	(125)
四、新世纪中国的“四大工程”	(130)
第六章 小城镇，大战略	(143)
一、小城镇是中国城镇化的战略选择	(143)
二、小城镇的可持续发展	(150)
三、实现中国城镇可持续发展的对策建议	(157)
第七章 创建“人-资-环”良性循环安全体系	(171)
一、创立“人-资-环一体化”思想体系	(171)
二、建立生态结构和功能的安全体系	(177)
三、实现“人-资-环”良性循环是全方位的变革	(185)
主要参考文献	(190)

New Strategy for Sustainable Development

Table of Contents

Chapter One	New coordinates for human civilization	(1)
1.	A yellow warning card for the 20th century	(1)
2.	A new thinking, bringing hope to all human races	(7)
3.	New coordinates for the contemporary civilization	(11)
4.	The natural choices for the Chinese	(17)
Chapter Two	New guiding rules for the great of renaissance of the Chinese nation	(25)
1.	New breakthrough on the concept of productive forces	(25)
2.	New ideas on natural laws	(32)
3.	New guidelines on economic rules	(39)
4.	New directions on science and technology	(47)
5.	New modes on the exploration of substance transformation	(52)
6.	New concepts on national security	(57)
Chapter Three	Great changes in economic growth methods	(59)
1.	The improvement of the socialist market economic system	(59)
2.	The promotion of major readjustments in economic structures	(61)
3.	Moving along the road of development to ecological economy	(65)

4. Protecting while developing and developing while protecting	(72)
5. The new model of clean production	(77)
6. Developing vigorously the environmental protection industries	(82)
Chapter Four Strengthening the agricultural technological revolution	(85)
1. The readjustment of the agricultural economic structures	(85)
2. The development of the ecological agriculture using high - technology	(89)
3. The development of the ecological agriculture in China	(92)
4. Major technical types of the ecological agriculture ...	(94)
5. The establishment of organic food bases	(99)
6. The promotion of agricultural environment management	(103)
Chapter Five Implementation of the Western Development Strategy	(108)
1. The protection and establishment of the ecological basic functions	(108)
2. The restoration of forests and grasslands from farms	(118)
3. The establishment of protective zones at the head-streams of the Yangtzi River and the Yellow River	(125)
4. The "four major projects" of China in the new century	(130)

Chapter Six	Small towns, big strategy	(143)
1.	Small towns are the strategic choice for China' s urbanization	(143)
2.	Sustainable development in small towns	(150)
3.	Suggestions on the introduction of sustainable development to the cities and towns of China	(157)
Chapter Seven	The creation of a healthy circulatory "man-resources - environment" security system	(171)
1.	The concept of the "man - resources - environment" integration	(171)
2.	The establishment of a security system based on considerations of ecological structures and functions	(177)
3.	A healthy "man - resources - environment" system implies a fundamental social change	(185)

第一章 人类文明的新坐标

一、20 世纪的“黄牌警告”

黄牌警告，这是全世界都通用的专业术语，在通常的情况下，多是在球类比赛场上对犯规的球员们，由裁判员出示的惩罚性的警示标志。人类万万没有想到，在 20 世纪中叶，大自然的总裁判“苍天”，对地球上的几十亿球民们，也发出了同样的“黄牌警告”。要问为什么？这就需要从根上说起。

工业革命至今已过去 200 多年，经历两个世纪的历史进程，随着科学技术和商品经济的发展，人类从地球上索取的财富，所创造的无以伦比的辉煌成果，超过了人类几千年的共同积累，使社会的生产力得到了极大的提高。特别是进入 20 世纪之后，人类以胜利者的姿态向地球展开了全方位的宣战，不论是发达国家还是发展中国家，都把发展经济列为首要任务，把更多的精力放在如何向生态环境索取资源上，不顾一切地实现工业化，把烟囱林立马达轰鸣作为显示工业兴旺的象征，把追求国民生产总值和国民收入的增长作为惟一指标，把千方百计实现工业化作为主要目的。并为此还形成了一套相应的经济管理模式。有的经济学家对这种经济模式曾预言，这种单纯追求经济增长的结果，必然出现国民生产总值就是国民资源和能源的总消耗，国民总收入就是国民的总污染，总消耗加上总污染就是生态环境的总破坏，也就是生产力的总根基发生总危机。果真不出所料，在世界各地，当人们庆贺工业化给人类带来累累硕果的同时，人类赖以生存的自然资源和生态环境却被破坏得十分严重，使地球和人类都面临着