

水土保持 可持续发展 研究

Study of Sustainable
Development of
Soil and Water
Conservation

● 董哲仁 主编



中国水利水电出版社
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藏书章

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内 容 提 要

全书围绕水土保持与可持续发展这一主题,深入探讨了水土保持政策与机制、水土保持与生态环境、水土保持与群众脱贫、水土保持与水资源综合管理等一系列社会热点问题,对于水土保持工作中的法制、机制和体制建设等问题提出了若干政策性建议。

本书可供从事水土保持、水资源管理、环境保护的宏观决策、研究和管理的技术人员使用参考。

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前言

水是生命之源，土是生存之本。水土资源是国家经济安全的重要战略资源，关系到我国经济社会的可持续发展和生态环境的恢复与改善。我国是世界上水土流失最严重的国家之一，水土流失分布范围广，面积大，侵蚀类型多，危害严重，治理难度大。严重的水土流失导致耕地减少，土地退化，沙尘暴频繁发生；河道水库泥沙淤积，洪涝灾害加剧；影响水资源的综合开发和有效利用，加剧干旱的发展；生态环境恶化，加剧贫困。水土流失已经成为我国的头号环境问题，并且危及到我国经济社会的可持续发展和小康社会的全面建设。

水土保持涉及水利、林业、农业、环境、建设、交通和铁路建设等各个部门。水土保持的可持续发展需要政府多部门的密切合作与公众、社团、企业的广泛参与，需要建立各部门、各行业之间，以及全国和地方之间的协调机制，同时，还需要开展国际合作，借鉴国外新的经验和新的管理模式。

全球水伙伴（Global Water Partnership，

GWP) 是在联合国机构的支持下于 1996 年成立的非政府国际网络组织。旨在促进水资源统一管理, 以公平的方式, 在不损害重要生态系统可持续性的条件下, 促进水土资源及相关资源的协调开发管理, 以使经济和社会利益最大化。全球水伙伴自创建以来, 与各个国际机构和各国政府密切合作, 为全球水资源管理事业做出了很大贡献, 已经发展成为具有广泛影响的国际非政府组织, 在可持续发展领域正发挥着重要作用。为推动我国水资源的可持续利用, 扩大国际交流与合作, 经中国政府有关部门批准, 于 2000 年 11 月成立了“全球水伙伴中国地区技术顾问委员会 (GWP China)”。全球水伙伴 (中国) 的宗旨是: 贯彻实施中国的新水法, 促进国内不同涉水部门、单位、团体之间的交流与合作, 促进社会公众的广泛参与和对话, 促进国际交流与合作, 努力推动中国水资源综合管理事业的发展。

为了交流各地水土保持经验、政策和方法, 促进涉及水土保持工作中各个部门之间, 特别是群众、基层、企业、社团与政府决策部门间的对话与交流, 以便为水土保持可持续发展提供建议和良策, 由全球水伙伴 (中国)、世界水土保持协会 (WASWC) 和中国水土保持学会 (CSSWC) 主办, 由江西省水利厅承办, 2004 年 11 月 5~6 日, 在江西省南昌市召开了主题为“水土保持可持续发展”的高级圆桌会议。这次会议共有四个议题: 水土保持政策与机制、水土保持与生态环境、水土保持与群众脱贫和水水土保持与水资源综合管理。

会议期间, GWP 中国地区技术顾问委员会名誉主席、中国水土保持学会理事长杨振怀, 水利部副部长鄂竟平, 江西省人民政府副省长胡振鹏, 水利部长江水利委员会主

任蔡其华等到会发表演讲，全球水伙伴高级顾问 Khalid Mohtadullah 先生出席会议并讲话，亚洲开发银行（ADB）、英国国际发展部（DFID）、世界自然基金会（WWF）等国际组织的官员和专家到会研讨。21 位代表作了讲话和多媒体报告，会议进行了自由发言和讨论。

这次高级圆桌会议代表面十分广泛，出席研讨会的代表共 60 多人，来自政府部门、水利、农业、林业、科研、大学、学会、国际组织和机构以及基层农村，涉及管理、社会、工程技术、经济、法律等多个学科，基本涵盖了与水土保持有关的各个利益相关者，包括管理者、决策者、专家学者和实践者，充分体现了圆桌会议的特点，通过互动，加深了解，促进涉及水土保持工作中各个部门之间，特别是群众、基层、企业、社团与政府决策部门间的对话与交流，从而为协调业界间的关系发挥积极作用。这次研讨会发表的论文和发言题材广泛，水平很高，涉及与水土保持相关的生态环境、农业节水、工程技术、战略思想和实践经验等。

为了使会议取得的成果得以传播，全球水伙伴（中国）决定编辑出版这本论文集。由于编辑出版整个过程时间仓促，加之水平有限，难免有不足和错误之处，敬请广大读者批评指正。

编 者

2005 年 1 月

Preface

Water is the source of life, and land is the base of surviving. Water and land resources are important strategic resources, which affect the sustainability of socio - economic development and recovering and improving of ecological environment. China is among the countries that mostly suffered from serious soil erosion. Soil erosion occurs in large scopes and big areas and in various erosion types, results in severe hazards, and it is very difficult to be treated. Severe soil erosion leads to reduction of farmland, land resource degradation, and frequent sand storm; results in siltation in river courses and reservoirs and more severe flood and waterlog; affects the comprehensive development and effective utilization of water resources; and it causes deterioration of ecosystem and deepening of poverty. It is the number one ecological environmental issue in China, and also endangers sustainable socio - economic development and building a well - off society in an all - round way.

Water resources involving sectors of water resources, forestry, agriculture, environment, construction, communication and railway construction. Sustainable development of soil and water conservation requires cooperation of government institutions and broad participation of public, societies, and enterprises, needs a coordination mechanism between sectors and industries and between national and local levels, it also requires international collaboration to use new experi-

ences and managerial type for reference.

Global Water Partnership (GWP), was established in 1996 by the initiative of the United Nations, the World Bank and several development agencies, to assist the countries by implementing Integrated Water Resources Management (IWRM) . GWP's mission is to facilitate IWRM, which, in an equitable way, aims to ensure the coordinated development and management of water, land, and related resources by maximizing economic and social welfare without compromising the sustainability of vital environmental systems. Since its establishment, GWP has made great contribution to water resources management in the world in close collaboration with international agencies and countries, and played an important role in the field of sustainable development. To facilitate sustainable development of China's water resources and enlarge international exchange and cooperation, GWP China Technical Advisory Committee (GWP China) was established in November 2000 on the approval of relevant government institutions. GWP China's mission is to carry out implementation of China's new Water Law, facilitate exchange and cooperation between sectors, organizations and societies involved in water resources, promote broad involvement and dialogues of public, enhance international exchange and collaboration, and make great efforts to facilitate integrated water resources management in China.

In the interest of finding out experiences, policies and methods of soil and water conservation in different areas, facilitating dialogues and exchange between different sectors, in particular between civilians, grassroots, enterprises, societies with government decision

making bodies, with the purpose of providing good suggestions to sustainable development of soil and water conservation, the High - Level Round Table Meeting on Sustainable Development of Soil and Water Conservation was held on November 5 - 6, 2004 in Nanchang of Jiangxi Province. It was organized by GWP China, the World Association of Soil and Water Conservation (WASWC) and the China Society for Soil and Water Conservation (CSSWC), and hosted by Jiangxi Provincial Department of Water Resources. There are four topics: policies and mechanism of soil and water conservation; soil and water conservation and ecological environment; soil and water conservation and poverty reduction; soil and water conservation and integrated water resources management.

Mr. Yang Zhenhuai, honorary chairman of GWP China Technical Advisory Committee and honorary director of China Society for Soil and Water Conservation, Mr. E Jinping, vice minister of Ministry of Water Resources (MWR), Mr. Hu Zhenpeng, vice governor of Jiangxi Provincial Government; Mrs. Cai Qihua, commissioner of the Changjiang River Water Resources Commission addressed the meeting. Mr. Khalid Mohtadullah, senior consultant of GWP, attended the meeting and delivered a speech, and officers and experts from Asian Development Bank (ADB), Department for International Development of UK (DFID), World Wildlife Fund (WWF) joined discussions. There are 21 representatives made speeches and presentations, and free speeches and discussions were carried on.

The High - Level Round Table Meeting has a very broad representation. There are more than 60 participants attended the meeting,

who are from government institutions, water resources, agriculture, forestry, research institutes, universities, academic societies, international organizations and farmer representative. The meeting involved many disciplines such as management, sociology, engineering, economy and law, and covered almost all stakeholders of soil and water conservation including administrators, decision makers, professionals and practitioner, which fully reflects the characteristic of round table meeting. Understanding was increased through interactions, and it facilitated dialogues and exchange between different sectors, in particular between civilians, grassroots, enterprises, societies with government decision making bodies, playing an active role in coordinating cross sector relation. Papers and speeches delivered in the meeting are very comprehensive in issues and with high level, dealing with ecological environment, agriculture water saving, engineering technology, strategic concept and practical experience.

In an effort to disseminate achievements of the Meeting, GWP China determines to compile and publish this proceedings. Since time is limited and knowledge is restricted, it's hard to avoid deficiencies and mistakes, therefore, your comments and corrections are welcome.

Editor

January, 2005

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在水土保持可持续发展高级圆桌会议开幕式上的致辞

鄂竟平

(水利部副部长)

各位来宾、女士们、先生们：

大家好！首先我代表中华人民共和国水利部，热烈欢迎来到全球水伙伴、世界水土保持协会理事会、世界野生动物基金会、亚洲开发银行、英国发展署的代表，以及国内外的专家学者会聚江西南昌，参加水土保持可持续发展高级圆桌会议。非常感谢大家长期以来对中国水土保持事业的关心与支持！

近几十年来，气候变化、森林减少和植被破坏，水土流失加剧，沙漠化扩展，人类赖以生存的环境受到严重威胁，全球面临的资源、环境问题日益突出。水是生命之源，土是生存之本，水土资源已成为 21 世纪人类最为重要的战略资源。搞好水土保持，保护水土资源，维系良好生态环境，改善生产、生活条件，保障经济社会可持续发展，是世界各国的共同责任，也是水土保持科技人员的使命。

众所周知，由于特殊的自然地理和社会经济条件，中国水土流失严重，生态环境脆弱，对经济和社会发展产生了十分不利的影响。水土流失导致土地退化，造成大量泥沙下泄，淤塞江河湖库，影响人民生产生活和生存环境。新中国成立以来，中国政府十分重视水土保持工作，组织

动员广大人民群众,进行了长期不懈的努力,全国已累计治理水土流失面积 89.7 万 km^2 ,通过水土保持措施累计保土 426 亿 t,增产粮食 2492 亿 kg,取得了显著成效。同时积累了丰富的经验,从典型示范到全面发展;从单项措施、分散治理到以小流域为单元,分区防治、分类指导,综合治理;从单纯治理到以防为主、防治结合;从传统的治理方法到依靠科技,采用和引进新技术、新方法和先进的管理模式;从防护性治理到治理开发相结合,生态、经济和社会效益统筹兼顾,协调发展;从单纯依靠政府行为组织到采取行政、经济与法律手段相结合,政府引导与市场经济推动相结合;从单纯依靠人工重点治理到人工治理和生态自然修复相结合,探索出了一条具有中国特色的水土保持之路。多年实践证明,中国治理水土流失的对策和措施是行之有效的。

进入 21 世纪,中国进一步加大了治理水土流失、防止土地退化、保护水土资源、建设良好生态环境的力度,把水土保持作为经济社会可持续发展的重要内容和长期坚持的一项基本国策,在工作思路 and 战略部署等方面进行重大调整。国务院批准实施的《全国生态环境建设规划》、水利部制定的《全国水利发展第十个五年计划和 2010 年规划》,都从宏观上对中国水土保持工作进行了调整和部署,明确了近期和中长期的水土保持目标及实施的重点区域,从确保国家用水安全、生态安全和粮食安全的高度出发,综合考虑体制、机制、法制、政策、经济、环境等方面的因素,提出了水土保持中长期发展战略框架和近期行动计划。近几年,中国在长江上游、黄河中上游以及环京津、东北黑土地、珠江上游石漠化地区等水土流失严重地区,实施水土流失综合治理、退耕还林、生态修复、防沙

治沙等一系列重大生态建设工程，取得重要进展。同时，认真贯彻《中华人民共和国水土保持法》，落实“三同时”制度，有效遏制了人为水土流失，中国的生态环境有了明显的变化，许多地方山变绿了、水变清了，人民过上了比较富裕的日子。

21 世纪是全球致力于经济和自然协调发展的重要时期，中国确立了全面建设小康社会的宏伟目标，并明确提出了要坚持科学发展观，以人为本，实现全面、协调可持续发展，走生产发展、社会进步、生活富裕、生态良好的道路。治理水土流失，改善生态环境将是我国新世纪经济和社会发展的一项重要的基础工程。我们将坚定不移地加大水土保持和生态环境建设的力度，强化依法监督，依靠科技进步，加强国际技术合作与交流，采取综合治理与自然修复相结合的技术路线，有效控制水土流失，以水、土地资源的高效、可持续利用，保障经济持续快速协调健康发展，实现人与自然和谐相处，为中国乃至世界生态环境做出新的贡献。

各位来宾、女士们、先生们，我衷心地希望通过这次圆桌会议，能够进一步加强我们在水土保持方面的密切合作，也希望各位来宾对中国的水土保持可持续发展提供建议和良策，共同推动中国乃至全球水土保持事业的发展。

最后，预祝本次会议取得圆满成功！

谢谢大家！