



中国水土保持

(月刊)

ZHONGGUO SHUI TU BAOCHI

2025 年第 3 期

(总第 516 期)

3 月 5 日在郑州出版

1980 年创刊

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发行主管 闫 耕(0371-66022619)

QQ:838347450

编辑出版 《中国水土保持》编辑部
地 址 河南省郑州市金水路 11 号

邮政编码 450003

编辑部 0371-66028761;66022610

稿件查询 0371-66022338

投稿网址 www.swcczz.cn

电子信箱 swcc2000@sina.com

印刷 河南瑞之光印刷股份有限公司

国内发行 《中国水土保持》编辑部

国外发行 中国国际图书贸易总公司
(北京 399 信箱)

定 价 15.00 元

中国标准连 ISSN 1000-0941

续出版物号 CN 41-1144/TV

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Mar. 5, 2025

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First Issue 1980 **Publishing Cycle** Monthly

Competent Department

The Ministry of Water Resources of P. R. C.

Sponsor

The Yellow River Conservancy Commission of MWR

Editor and Publisher

Editorial Board of "Soil and Water Conservation in China" (No. 11 Jinshui Road, Zhengzhou, Henan

450003, China)

Editor-in-Chief ZHAI Xuliang

Associate Editor SUN Zhanfeng

E-mail swcc2000@sina.com

URL <http://www.swcczz.cn>

Overseas Distributor

China International Book Trading Corporation
(P. O. Box 399, Beijing, China)

SOIL AND WATER CONSERVATION IN CHINA

No. 3 (516) 2025

Abstracts

Practice of Soil and Water Conservation Carbon Sink Trading in Guizhou Province

..... MENG Tianyou¹, NING Maoqi², JIANG He³, et al.
(1. Bijie City Monitoring Center of Soil and Water Conservation, Bijie, Guizhou 551700, China;
2. Guizhou Science and Technology Demonstration and Promotion Center of Soil and Water Conservation, Guiyang,
Guizhou 550002, China; 3. Zhijin County Monitoring Center of Soil and Water Conservation, Zhijin, Guizhou 552100, China)(9)
On October 31, 2024, as the first soil and water conservation carbon sink trading project in Southwest China, the key prevention and control projects for soil and water conservation in the Huahong river and Baishui river small watersheds of Zhijin County of Guizhou Province were successfully signed at the Guizhou Ecological Products Trading Center. China Energy Zhijin Power Generation Co., Ltd. traded 34 000 tons of soil and water conservation carbon sink with a transaction amount of 1.19 million yuan, which provides Guizhou's experience in continuously enhancing soil erosion and water loss control methods, expanding the transformation pathways of *the two mountains*, and building the national ecological civilization experimental zone and ecological civilization construction pilot zone. The paper summarized the main practices of this soil and water conservation carbon trading project, including exploring and formulating the *Guizhou Province Soil and Water Conservation Project Carbon Sink Methodology (Trial)*, and certifying the reduction of soil and water conservation carbon emissions by 174 200 tons, and aiming precisely target enterprises with a need to purchase carbon sink through collaborative efforts among provinces, cities, and counties, and answering the question of why spend money to buy carbon credits by taking into account the 4+1 role of purchasing carbon sink for soil and water conservation (including implementing social responsibility, advanced investment, mortgage financing, carbon substitution for compensation, and first order promotion effect). In addition, in response to the current issues such as the fact that soil and water conservation carbon sinks have not been included in China Certified Emission Reductions (CCER), trades can only be carried out within the region, and enterprises have concerns about purchasing, the paper proposed suggestions including strengthening top-level design, promoting the integration of soil and water conservation carbon sinks with CCER, standardizing carbon sink trading mechanisms, and improving supporting measures.

Key Words:soil and water conservation; carbon sink trading; certify; first order; Zhijin County; Southwest China

Practice and Suggestions on Science Popularization and Publicity and Cultural Construction of Soil and Water Conservation in Guizhou Province

..... SUN Quanzhong¹, CHEN Juyan²
(1. Guizhou Science and Technology Demonstration and Promotion Center of Soil and Water Conservation, Guiyang, Guizhou 550002, China; 2. Guizhou Academy of Forestry, Guiyang, Guizhou 550005, China)(12)
As an important part of soil and water conservation work in the new era, science popularization and publicity and cultural construction of soil and water conservation play an important role in promoting ecological construction of soil and water conservation and industry development. Based on summarizing the practical experience of science popularization and publicity and cultural construction of soil and water conservation in Guizhou, this paper summarized the shortcomings of soil and water conservation science popularization in terms of publicity methods, publicity facilities, cultural construction, and emphasis degree. And the paper proposed relevant suggestions including transforming thinking patterns, enhancing publicity efficiency, promoting demonstration construction, improving publicity facilities, creating soil and water conservation culture atmosphere, launching cultural and innovative products, increasing publicity methods, strengthening science popularization and publicity activities and promoting interactive communication.

Key Words:soil and water conservation; science popularization and publicity; cultural construction; Guizhou Province

Layout of Soil and Water Conservation Measures in Gansu Province Based on Soil and Water Conservation Rate

..... LYU Wenqiang^{1,2}, MA Hongbin³, ZHANG Yu⁴, et al.
(1. Gansu Institute of Soil and Water Conservation Science, Lanzhou, Gansu 730020, China;
2. Gansu Research Center of Soil and Water Conservation Engineering, Lanzhou, Gansu 730020, China;
3. Yellow River Basin Monitoring Center of Soil and Water Conservation and Ecological Environment, Xi'an, Shaanxi 710021, China;
4. Gansu Province Department of Water Resources, Lanzhou, Gansu 730000, China)(63)
To further accurately implement the requirements of ecological construction of soil and water conservation, based on the current and long-term target values of soil and water conservation rate in Gansu Province, the paper explored the soil and water conservation strategies and measures layout of the three-level zoning of soil and water conservation in Gansu Province. The outcomes show that a) the current and long-term target values of soil and water conservation rates in 8 third-degree areas vary from 51.38% to 80.76% and 54.02% to 87.65%, respectively; b) among them, the current value of the ecological maintenance and water source conservation area of the Ruogai Plateau is the highest, the long-term target value of the soil conservation and disaster reduction area of the Longnan Mountains is the highest, and the current and long-term target values of the farmland protection and sand prevention area of the Hexi Corridor are both the lowest; c) the difference between the long-term target value and the current value of soil and water conservation rate vary from 0.66 to 18.30 percentage points, with the highest value in the water storage and soil conservation area of the Shanxi, Shaanxi and Gansu Plateau gully and the lowest value in the ecological maintenance and water source conservation area of the Ruogai Plateau; d) the main functions of soil and water conservation include farmland protection and wind and sand prevention, water storage and soil conservation, water source conservation, disaster prevention and reduction, etc. And based on these, the paper proposed the systematic management for mountains, waters, forests, farmlands, lakes, grasses, and sands with small watersheds as the unit, ecological restoration mainly focuses on the protection of natural grasslands, forests, rivers, lakes, and wetlands, as well as prevention and control strategies and soil and water conservation measures layout for farmland protection according to water yield.

Key Words:soil and water conservation; measures layout; soil and water conservation rate; Gansu Province