

森林可持续经营国际会议论文集编委会

The Direction of Forest Management

—Proceedings of the International Conference on SFM

森林经营的方向

——森林可持续经营国际会议论文集萃

中国科学技术大学出版社

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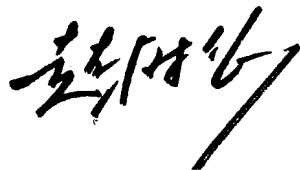
森林是实现可持续发展的基础,关系人类的命运和地球的前途。在经济社会飞速发展的今天,人们越来越清楚地认识到生态环境对人类生存和可持续发展的重要性。当今世界普遍关注的十大环境问题:温室效应、臭氧威胁、生物多样性危机、水土流失、荒漠化、土地退化、水资源短缺、大气污染和酸沉降、噪声污染及热带雨林危机等,无不与森林资源日益减少有着直接或间接的联系。森林问题从来没有像今天这样受到全球的高度关注,可以说,解决森林问题是解决生态环境问题的关键。

为了人类的生存和发展,人们越来越关心森林资源的保护、合理利用和可持续经营。1991年第十届世界林业大会,特别是1992年联合国环境与发展大会以后所形成的森林可持续经营思想,将可持续经营作为森林经营和林业发展的目标,大大推进了林业科学的飞跃发展。在这一理论的指导下,人类对森林的利用由单纯地索取向人与自然的协调、由单目标利用向多目标利用、由专项经营向系统经营、由工业利用向发挥森林多种效益转变。

本次大会围绕“森林可持续经营既是林业的发展目标,又是对生态文明建设的贡献”这一主题,来自德国、瑞典、日本、中国和有关国际组织的数十位专家,从各自的研究领域和不同角度,深入讨论了森林可持续经营的基本概念、主要内涵、监测技术、林分评估因子、经营模式与技术、实际应用情况以及可持续经营所产生的社会经济和生态效益等。同时对“森林健康”和“近自然森林经营”等理论与实践也进行了介绍,内容十分广泛。这些新的理念与实践,正是广大林业和生态工作者所需要的。

21世纪必然是生态文明、知识经济和可持续发展“三位一体”的时代。人类已经开始注意保护与恢复自然、重建人与自然的和谐统一。森林可持续经营是保护地球生态环境的最根本途径,只有保护好森林资源,建立和谐的生态环境,人类才会有美好的未来。本书将这次会议的论文汇集成册,大大丰富了森林可持续经营学科的知识宝库,对推动林业持续健康发展和加强生态建设具有极其重要的指导意义。

中共安徽省委常委
安徽省人民政府副省长



PREFACE

Forests are the basis to make sustainable development come true and they are also linked to the human destiny and future of the earth. With the rapid development of the social economy, people became increasingly aware that the environment is vital to the human survival and sustainable development. Nowadays, there are ten environmental problems being paid great attention to: the increase of greenhouse gases in the atmosphere, the ozone layer destruction, the biological diversity crisis, soil and water erosion, desertification, soil degradation, the depletion of water resources, atmosphere pollution and acid rain, noise pollution, and deforestation of tropical forests. All these phenomena have direct or indirect relations with the decrease in forest resources. In other words, the solution to these environmental problems is closely related to solving the forest problems.

People are paying more and more attention to protection, reasonable utilization and sustainable management of forest resources for human survival and development. The principles of Sustainable Forest Management (hereinafter called SFM) formulated at the 10th World Forestry Conference in 1991 and especially at the UN Environment and Development Conference in 1992 made sustainable management the overall goal of forest management and forestry development, which accelerated the pace of development in forestry sciences. In line with this principles, forest utilization shifts from simple extraction to a harmonization between people and nature, single production targets are turning into multiple ones, specialized management is transforming to ecosystem management, industrial utilizing switches to forest management for multiple benefits.

The theme of this conference is that SFM is not only a forestry development target, but also a contribution to the building of an ecological civilization. Dozens of experts from Germany, Sweden, Japan, China and related international organizations, from each of their research fields and different point of views, have thoroughly discussed about the basic conception and main intention, the supervision technology and evaluation criteria, the management schemes, technologies and practical application of SFM, and social, economic and ecological benefits that sustainable management is able to generate. At the same time, they introduced principles and the practice of Forest Health and Nature-oriented Forest Management. This diverse content and the abundant principles and practices presented here are exactly what forestry and ecological researchers need. These proceedings of the conference enrich the knowledge of SFM in theory and practice. They are highly valuable for the introduction of a sound developing forestry henceforth and construction of an ecological civilization.

The 21st century will inevitably become an age of combining ecological civilization, wise economy and sustainable development. People are beginning to pay attention not only to nature protection but also to its rehabilitation, restoring the harmony between people and nature. People shall have a bright future if we maintain the forest resources in a healthy state and build up a harmonious environment by applying SFM as the best approach to achieve this.

Mr. Zhao Shucong

The author of this preface is a Standing Member of CCPC and Vice Governor of Anhui Province.

前 言

德国是世界上林业发达国家之一,由德国林学家提出和创立的森林可持续经营理论和近自然林业经营方法,是对世界林学发展的贡献,得到了国际社会的充分肯定。特别是近百年来形成的人工森林生态系统经营理论和方法,为世界林业发展提供了宝贵经验。中国林业正处于恢复性发展的大好时期,树立林业科学发展观,结合实际,学习、引进和推广国际先进的森林可持续经营理念,借鉴德国及其他林业发达国家森林可持续经营技术与经验,对于提高中国森林生态系统的质量和林地生产力,实现林业可持续发展目标,具有十分重要的意义。

安徽是南方集体林区的重点省份,林业在经济社会发展中占有很重要的地位,实现森林可持续经营,不仅是林业,也是经济社会可持续发展的基础与条件。从1996年开始,安徽省相继实施中德财政合作安徽长防林项目和皖南生态造林扶贫项目,在中外双方林业科技人员的共同努力下,以实现林业可持续发展为目标,积极引进国际先进的森林经营技术和经验,在森林可持续经营的政策、机制、技术、经济等方面,进行了系统性的探索和实践,积累了宝贵的知识和经验。交流和总结项目建设成果,对于现阶段南方集体林业如何实现森林可持续经营,将有很大的帮助。

2007年5月,安徽省政府赵树丛副省长与德国复兴发展银行(KfW)第一副总裁穆思格博士(Dr. Muessig),共同商定在安徽举办森林可持续经营国际会议,随后安徽省人民政府、国家林业局、德国复兴发展银行分别批准会议方案,并决定由国家林业局、安徽省人民政府、德国复兴发展银行共同主办森林可持续经营国际会议。这次会议的主旨是:介绍国际国内森林可持续经营理论研究、实践与发展情况,讨论森林可持续经营在自然资源保护中的作用,交流高级森林经营理念和技术最新成果,共享森林可持续经营的成功经验,探讨中国南方森林可持续经营的管理机制和技术模型。为了开好这次国际会议,承办会议的安徽省林业厅围绕大会交流的主题,广泛向国内外知名林业专家、学者征集论文,得到了国内外有关林业管理机构、科研院所、高等院校、国际组织、学术团体等单位 and 个人的积极响应,截至2008年8月15日,共收到论文一百余篇。安徽省林学会也在省内组织开展了相应的专题论文征集活动。在此,谨向奉献心智的各位专家、学者及科技人员表示衷心感谢!

征集到的论文,广泛涉及森林可持续经营概念、研究发展、林业政策、培训实施、林业经济、经营方法、社会影响、清洁发展机制、森林认证、农村发展等诸多方面,内容丰富、观点鲜明、题材新颖,主要针对我国南方集体林区的森林经营管理,提出了许多有益对策和建议。集其精华,编辑为《森林经营的方向》出版。由于篇幅有限,对论文进行了编辑和审定,有的论文仅采取摘要或标题入选,不妥之处,敬请有关作者谅解。

由于编写时间仓促,文集中难免有疏漏或错误之处,欢迎批评指正。

编 者

2008年8月

FOREWORD

Germany is one of the forestry-developed countries in the world. SFM Theory and the close-to-nature forest Management Method, which were proposed and founded by German foresters have contributed to the world's forestry development and achieved international acclamation. Moreover, also the conventional forest eco-system management theory and method developed during the last 100 years provides valuable experiences to the international forestry development. Since Chinese forestry is now in a development period characterized by forest restoration, the formulation of a scientific forest development concept, the study and promotion of advanced international SFM concepts, and the practical SFM experiences of Germany and other forestry developed countries are significant to improve the quality of Chinese forestry ecosystems, the productivity of forestlands, and to achieve the overall objective of sustainable forestry development.

Anhui is a typical province in the southern collective forest area. Forestry plays an important role in the economy and society; therefore, achieving SFM is the basis and precondition not only for forestry but also for sustainable development of the economy and society. Since 1996, SGAP Anhui I and Anhui II were implemented successively in Anhui province. With joint efforts of Chinese and foreign forestry technology researchers, international advanced forestry management practices and experience were introduced in Anhui Province to achieve sustainable forest development. Valuable knowledge and experience was gained through systematic exploration and practical application of different aspects of SFM such as policy, methodology, technology, and economy. The dissemination of the achievements of these projects in Anhui will provide valuable lessons learned for the application of SFM in the southern collective forest areas.

In May of 2007, Mr. Zhao Shucong, Vice Governor of Anhui Province, together with Dr. Muessig, First Vice President of KfW, decided to hold an International Conference on SFM in Anhui Province. Lateron, Anhui Government, SFA and KfW separately approved the conference program and decided to sponsor the conference. The main objective of this conference is to introduce SFM theory and research as well as the practice and development of SFM both international and domestic, to discuss the role of SFM in natural resources protection, to disseminate advanced forest management concepts and latest technology achievements, to share successful SFM experiences, and to explore suitable management mechanisms and models for Southern China. As one of the sponsors and as the organizer of this international conference, the Forestry Department of Anhui Province has called for papers from foreign and domestic well-known forestry experts and researchers and achieved active responses. By the date of 15 August 2008, More than 100 papers were submitted from different institutions and associations such as forest management institutions, scientific research institutions, universities, international and academic organizations, as well as researchers and practioners active in the field of SFM. Meanwhile, the Anhui Forestry Society is developing a special papers collection based on the submitted papers. Herewith, we would like to express our sincere appreciation to all of the experts, scholars and researchers who have dedicated their efforts and expert knowledge to contribute to the conference.

The collected papers present a wide range of topics such as SFM concepts, research development, forest policies, training practices, forest economy, forest inventory and management methods, CDM, and

social and rural development aspects of SFM. The contents are plentiful and provide different viewpoints, many of them are new and innovative. A great number of helpful measures and suggestions are made for SFM in collective forest areas in Southern China. These papers are published as a monograph of "Direction for Forest Management" providing orientation and guidance. Due to the limited space in this volume, the papers have been edited, some are only included as an abstract or only the title mentioned for further reference. We hope for the understanding of the authors in case there are any shortcomings in dealing with the papers. We also welcome suggestions and critical remarks that will help us to improve this collection.

The Editors
August, 2008

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