

## 北京林业大学经济管理学院

"英才计划"出版工程

编委会主任: 陈建成主编: 温亚利 张卫民

# 林业统计、监测与评价指标体系和方法研究

THE INDICATORS SYSTEM AND METHOD STUDY ABOUT FORESTRY STATISTIC SSESSMENT

◎ 陈文汇 刘俊昌 胡明形 等 著



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## 序言

多年来,北京林业大学经济管理学院以建设和培育国家重点学科——林业经济管理学科为目标,抢抓机遇,深化改革,瞄准学科发展前沿,凝聚全院师生智慧,激发一切可利用资源的活力,团结一致,与时俱进,精思厚德,以人为本,科学发展,敢为人先,在教学、科研、人才培养和社会服务诸方面取得了显著进步。仅 2010 年,学院在高层次科研项目数量、科研经费总量、高质量学术论文数量、学生获奖层次、本科教学质量评价、专业学位建设等 6 方面实现突破,创学院历史最好成绩。2010 年学院获得国家自然基金、国家社科基金和教育部人文社科基金等国家级课题 7 项;被 SCI、EI 和 ISTP 三大检索系统检索的论文共 33 篇;学院教师获全校理论课教学质量评价第一名;学院学生获"全国先进班集体"称号和 58 项省级以上学科竞赛奖;学院新增工商管理硕士(MBA)、应用统计硕士、会计硕士、国际商务硕士四个专业硕士学位授权学科点。这些成绩的取得,为学院的改革和发展奠定了良好的基础。

为了进一步推动学院在"十二五"期间快速发展,从 2010 年起,学院计划用五年时间,在全院推进"英才计划"建设项目。该计划包括"创新团队工程"、"出版工程"、"奖励工程"和"论坛工程"四个建设工程。"创新团队工程"旨在林业经济管理重点学科和其他具有优势和潜力的学科领域,以突出重点团队建设及领军人才培养、突出高水平标志性成果产出为原则,组建学术研究团队,择优提供研究费用资助。"出版工程"旨在鼓励学术创新、传播学术思想、扩大学术影响,资助学院教师多出具有影响力的学术专著。"奖励工程"旨在引导和激励教师申报高层次科研项目、产出高水平学术成果,鼓励教师关心学院发展、积极投身学院教学和科研工作,对在科研、教学和学院发展中取得突出成绩的教师进行奖励。"论坛工程"旨在营造学术氛围、加强学术交流、凝聚学术智慧、扩大学术视野、提倡学术创新,举办各种形式的学术论坛。

"出版工程"作为"英才计划"的重要组成部分,其实施范围在兼顾学院各学科领域的基础上,适当向林业经济管理学科领域倾斜。众所周知,林业经济管理学科在国家生态建设、低碳经济发展及现代林业体系构建中承担越来越重要的人才培养及科学研究责任。北京林业大学林业经济管理学科作为全国同类学科中唯一的国家重点培育学科,在林业经济理论研究方面长期积累,形

成具有中国特色的林业经济管理学术体系,在林业经济管理学科发展,以及参与国家林业重大问题、前沿和热点问题研究中发挥了积极作用。为促进学科发展,提升学科服务于社会发展的水平,北京林业大学林业经济管理学科正努力开展林业经济理论系统研究,以及林业经济重大问题的持续研究,尝试对中国林业经济发展进行理论与实践的梳理和总结,更好地为中国林业发展发挥理论指导作用。

"英才计划"出版工程项目将系统、全面地向社会介绍北京林业大学林业经济管理学科及相关学科领域最新的研究成果。主要涉及林业经济管理基础理论,林业经济重点和热点问题,国内外林业经济与政策比较,以及经济学、管理学和政策学最新研究成果在林业上的应用等方面。这些著作中既有青年教师在博士论文基础上形成的最新著作,也有教师最新科学研究成果。该出版工程不求研究内容及形式的系统性和完整性,更注重创新性及探索性;特别是对于新时期中国林业发展与社会经济可持续发展关系、林业在应对全球气候变化中的经济与生态环境政策、当前中国改革与发展中涉及林业与生态环境的关键经济政策问题的创新性研究给予高度重视。

这些著作大多是我校经管院中青年林业经济工作者的研究成果,在学术上可能还有不尽完善之处,一些问题在学术界可能也有不同观点,我以为,实施该出版工程的根本目的是繁荣中国林业经济管理研究,鼓励学术创新,勇于探索林业经济重大问题,更好地为中国林业经济发展服务,同时使有志于中国林业经济研究的广大中青年林业经济工作者有机会发表自己的成果,与学术界交流、沟通和争鸣,提升他们的学术水平,为中国林业发展奠定人才基础。

北京林业大学校长

宋维明

2011年5月16日

### Foreword

Over the years, School of Economics and Management (SEM) of Beijing Forestry University (BFU) has made a great progress with an aim of building and fostering the national key discipline - forestry economics and management. We seize the opportunity, deepen the reform, aiming at the development of frontier subjects and gather all the wisdom and inspire all available resources and energy of teachers and students. We realize a scientific development, going forward with the times and people-oriented in teaching, research, personnel training and social service. In 2010, SEM got a breakthrough of history because we got 7 major projects from National Natural Science Foundation project, the National Social Science Fund and the Ministry of Education, Humanities and Social Science Fund and other national projects. About 33 papers were cited by SCI,EI and ISTP, with students winning the National Advanced Course Collective and more than 58 provincial level of academic competition awards. Four new programs of graduate studies were approved including Master of Business Administration (MBA), Master of Applied Statistics, Master of Accounting, Master of International Business. All the above achievements have laid a good foundation for the reform and development of SEM.

In order to further promote the development of college in the Twelfth Five-Year Period, from 2010, the college plans to use five years to promote Cultivating Talents Programs. The plan includes Innovation Team Project, Publication Program, Award Program and Forum Project. Innovation Team Project aims to focus on economic management in forestry and other disciplines which have advantages and potentials to highlight the building of the key leader in team and personnel training, highlighting the high level output of the principle of the landmark achievements and provide funds to the formation of research teams in the selection of the best research. Publication Program is to encourage academic innovation, disseminate of academic thinking, and expand academic impact of SEM by funding the publication of academic achievements made by teachers. Award Project aims to guide and encourage the teachers to apply for high-level scientific research projects, and academic achievement of high level, encourage teachers to care about development of the institute by taking an active part in university teaching and research work . Forum Project aims to create academic atmosphere, strengthen academic exchanges and combine academic intelligence by expanding academic horizons and holding various forms of academic forums.

Publication Program is an important part of Cultivating Talents Programs, which will put emphasis on economic management disciplines with the scope of all various disciplines in SEM. As we all know, forestry economics and management assumes an

increasingly important responsibility for personnel training and scientific research in the national ecological construction, low-carbon economic development and construction of modern forestry system. Forestry economics and management of BFU, as the only nation greatly supported in all similar universities, has formed an academic system of the forestry economy with Chinese characteristics with long-term accumulation, and played an active role in the development of economic management disciplines and participation in national forestry major issues and hot issues of frontier. To promote academic development and enhance academic services to the community, economics and management disciplines of BFU are working to carry out systematic study on forestry economic system theory and continuous study on major forestry economics issues, trying to summarize and sort out the Chinese forestry economic development in both theory and practice to play a better role in guiding the development of forestry in China.

Publication Program will make a comprehensive introduction of the latest achievements in forestry economics and related disciplines to the society, including forestry management based on economic theory, economic priorities and hot issues in forestry, domestic and international comparison of forestry economics and policy, as well as economics, management and policy studies on the latest academic achievements in the forestry aspects of the application. All of these works include the latest work based on doctoral thesis of young teachers and the latest scientific research of teachers of SEM.

The publication does not seek a systematic integrity in the content and form, just to put more on innovative and exploratory research, particularly focuses on the relationship of forestry development in new period and sustainable economic and social development, including the global climate change in response to the economic and environmental policies, China's current reform and development related to forestry and ecological environment, etc.

These works are mostly works of young research workers in forest economics of SEM of BFU. They may not be quite complete and there may be different point of view in the academia, but our purposes are to make the research of forestry economics more prosperous, encourage academic innovation, the courage to explore major issues of forestry economy and better economic development of China's forestry services, which will give chances to young researchers in forestry economics to publish their achievements, and push the exchanges and communication and contention to improve their academic standards for laying a base of talents for forestry development in China.

President of Beijing Forestry University **Song Weiming** May 16, 2011

## 前言

林业统计监测与评价是林业经济统计的重要组成部分。随着我国林业经济的发展变化,开展统计监测与评价已经成为及时了解、掌握林业经济发展动态的重要方法与手段。长期以来林业科研与管理实践人员在这一领域开展了大量的研究工作,取得了一批重要的研究成果如现代林业统计评价研究、林业重点工程社会经济效益监测研究等。同时在实践领域不仅在森林资源、湿地资源、荒漠化治理以及野生动物植物等方面开展了涉及技术方面的监测与评价,而且还陆续开展了林业重点工程社会经济效益监测和集体林权制度改革监测等工作,并研究制定了林业重点工程社会经济效益监测与评价行业标准,推动了我国林业统计监测与评价工作的发展和水平的提升,为系统科学评价我国林业事业发展及相关政策的效果等提供了重要的参考和依据。

北京林业大学经济管理学院的林业经济统计教学与科研团队在刘俊昌教授、胡明形副教授、陈文汇副教授的带领下,与他们的博士和硕士研究生在林业统计指标体系改革,林业产值计算方法,林业产业和林产品分类,野生动植物统计与价值核算,林业社会经济效益监测与评价等方面进行了深入探讨,承担了国家自然科学基金、国家公益行业专项、国家发展改革委、国家林业局、北京市园林绿化局、广东省林业局、世界自然基金会等部门的10多项科研项目,取得了一系列的研究成果,完成林业统计领域的博士论文7篇,硕士论文8篇。到目前为止,已经出版了《林业产值的计量分析和应用研究》、《中国野生动植物资源利用的统计体系研究》、《国内外野生动植物保护管理与统计研究》、《中国城市林业与园林绿化统计研究》等多部著作和数十篇论文,获得梁希林业科学技术奖二等奖、北京林业大学哲学社会科学优秀成果二等奖等十多项各类奖励。

《林业统计监测、评价指标体系与方法研究》是我们研究团队系列研究 成果中的一部分,期望本书的出版能够为林业统计监测与评价的理论研究与实 践工作提供参考。本书的成果是在林业统计的管理部门和北京林业大学经济管 理学院的各位同事帮助和支持下完成的,特别是与国家林业局计资司统计信息 处、国家林业局三北局,国家林业局经济发展研究中心,世界自然基金会等部 门的相关课题支持分不开。本研究小组对在整个研究工作中给予我们帮助和支 持的各级领导、专家、工作人员表示感谢。另外,在研究中对于该领域的各位 专家学者的研究成果的引用虽然在文中或文后参考文献中已经注明,但作为作 者还要在此对各位表示诚挚的谢意,正是参阅和引用了你们的各类资料和研究 成果,才使得我们的研究工作得以顺利展开。

我们希望通过本书的出版,能够对我国林业统计监测与评价工作的开展 提供借鉴和启示,为我国林业事业的健康发展尽绵薄之力。在正式编辑本书时, 我们也发现,由于学术水平和认识上的局限,加上时间仓促,这本书还存在许 多的不足之处,请各位读者给与批评指正。

衷心感谢中国林业出版社的大力支持和帮助以及在本书编写过程中给与 我们支持的各位同行和朋友,没有他们的大力支持我们是难以将本书奉献给各 位读者的。

> 著者 2013年4月

## **Preface**

Forestry Statistics Monitoring and Evaluation (M&E) is an important part of the forestry economic statistics. With the development of the forestry economy, launching statistical M&E has been a main method of learning about the dynamic changes of forestry economy in China timely. Forestry researchers and executive personnel have undertook lots of research and got many important achievements such as "Analysis of Modern Forestry Statistical Evaluation", "Monitoring and Assessment of the Socioeconomic Impacts of China's Key Forestry Programs" etc. in this area for a long period. And simultaneously, they have not only launched technological M&E in terms of forest resources, wetland resources, desertification control and wildlife plants ,but also monitored the socio-economic impacts of key forestry programs as well as the collective forest rights reform in succession, and during practice, its industry standard has been worked out. These achievements have improved the level of related work and provided important references and basis for evaluating its development and related policy effects in the field of forestry statistic M&E in our country.

The forestry economic statistics teaching and research team which is led by Prof. LIU Junchang, A.P. HU Mingxing and A.P. CHEN Wenhui together with their Doctoral Candidate and Master Degree Candidate in School of Economics and Management, Beijing Forestry University has been studying and discussing in the field of reform of forestry statistic indicator system, calculation method of forestry output value, classification of forestry industry and forestry products, statistics and value accounting of wild fauna and flora, M&E of the socio-economic impacts of key forestry programs for a long time. And at the same time, this team has undertook a number of research projects for several organizations such as the National Natural Science Foundation, the National Charity Industry-specific, the National Development and Reform Commission, the State Forestry Administration, Beijing Gardening and Greening Bureau, Guangdong Forestry Bureau, the World Wide Fund for Nature (WWF) etc.. On this basis, a series of research results, including 7 doctor thesis and 8 master papers, have been achieved in the area of forestry statistics. And until now, several books such as "Study of the Calculation, Analysis and Application of Forestry Output Value", "The Study of Statistic System on Wildlife Resources Using in China", "the Study on the Wildlife Protection, Management and Statistics in the World", "the Study on Statistics of Urban Forestry and Landscape Greening in China" etc. And dozens of papers have published and also got numbers of award such as Second Prize of Liang Xi Forestry Science and Technology Award, Second Prize of Beijing Forestry University Philosophy and Social Sciences Outstanding

#### Achievement Award etc.

"Forestry Statistics Monitoring and Evaluation Indicator System and Method Analysis" is a part of the achievements of our research team. We do sincerely hope the public of this book can provide reference for forestry statistics M&E both in theory research and practical work. I would like to thank my colleagues from School of Economics and Management, Beijing Forestry University and the management department of forestry statistics, especially the Section of Statistics and information, Department of Development Planning and Assets Management, the Three-North Bureau, State Forestry Administration, P. R. of China, Economics and Development Research Centre, State Forestry Administration, P. R. of China, WWF, and etc. Because without your support and help, this book cannot be published as schedule. We would extend our sincere gratitude to all the leaders, experts and staff members for their contribution throughout the whole research. Additionally, although we have indicated the quote of the experts' research result in or after the text, but as author, I am also gratefully indebted to you all for sharing your viewpoints which brought us lots of inspiration. And I also want to thanks the China Forestry Publishing House for their strong support of publication.

We do hope it can provide some references and enlightenments for forestry statistics M&E in China to publish this book. However, because of the limitations of our knowledge and academic standard and time constraints during the period of formally editing, we also found there are still some inadequacies and omissions in this book. Therefore, we would humbly accept your criticism and correction.

#### Author

April of 2013

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