



绿色核算

森林资源核算及纳入国民经济核算体系
的理论、方法、实证研究

张颖 著

中国环境科学出版社

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GREEN ACCOUNTING

——A THEORETICAL AND EMPIRICAL STUDY
ON VALUE ACCOUNTING OF FOREST RE-
SOURCES AND BRINGING OF IT IN LINE WITH
THE NATIONAL ECONOMIC ACCOUNTING SYS-
TEM IN CHINA

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前 言

20 世纪 80 年代以来,资源短缺和环境恶化问题日益引起了世界各国的普遍关注。一些国家、地区、国际组织和研究机构纷纷投入大量人力、物力、财力进行研究,寻求解决这一问题的途径。研究中,大家普遍认为,必须采取经济手段,改变资源无价的观念;组织力量研究资源价格的计量问题,把资源的消耗使用纳入国民经济的核算体系之中,保护和合理利用好现有的资源。目前,美国、加拿大、法国、德国、挪威、荷兰、英国、日本、印度尼西亚、菲律宾、哥斯达黎加等 20 多个国家和地区分别进行了这一问题的研究,并取得了一定的成果(孔繁文,1993)。联合国经济、社会信息和政策分析部统计处于 1994 年也编制了《综合环境和经济核算》手册,试图将常规的经济帐户和环境与自然资源帐户联系起来,系统描述自然环境与经济的相互关系,为制定社会、经济和环境政策提供依据。

我国从 1987 年着手这一问题的研究(李金昌,1988),在美国世界资源研究所、福特基金会等国际组织的资助下,林业部、国家科委、国家统计局、中国林业科学研究院等单位进行了较系统的探索,在国内外产生了一定的影响。目前,国家统计局正在开展自然资源核算及纳入国民经济核算体系的试点研究(国家统计局等,1997),以期在今后切实将综合环境和经济帐户纳入国家级的经济发展规划之中。本研究正是在这一背景下进行的,并且是作者博士论文的全部内容和在国外进行博士后研究的论文的极小部分内容。本书是作者从 1994 年以来,多年从事森林资源核算研究的心血的结果。

我们知道,森林资源核算是建立在会计核算和业务核算基础上的宏观的统计核算,除了实物量的核算外,更主要的是进行价值的核算。在核算中,无论实物量还是价值量,都要进行流量与存量的核算。流量和存量的核算,又需要一定的经济帐户和自然资源帐

户来支持。这一方面,我国以前没有进行过全面的研究。尤其是森林资源的价值量核算,涉及到森林资源的价格确定问题。虽然森林资源的评价在18世纪或更早已经开始(于政中,1995),林价的确定,林地的评价等研究也一直方兴未艾,但仅仅对某一林班、某一小班或某一块林子或林地来说有成熟的评价方法,对全国这样跨省(区)、地、市、多林班、多林相、立地条件和地利各异的森林的综合价格的确定和核算还缺少思路。因此,本书从最基本的森林的价值评价、国民经济核算的具体理论的研究开始,到如何把森林的价值量纳入国民经济核算体系等都作了系统的探讨。

本书包括三大部分,十三章。第一部分,研究森林资源核算及纳入国民经济核算体系的理论、方法;第二部分,具体研究森林资源核算及纳入国民经济核算体系的有关内容和帐户;第三部分,在前两部分的基础上,进行国内外森林资源核算的实证研究。这些都是在联合国《综合环境 and 经济核算》的基础上,结合我国的国情进行的。

本书在许多方面有所创新,其中一些研究成果引起国内外的普遍的关注。《科技日报》、《中国绿色时报》、《北京日报》等6种报刊报道过其中的部分研究成果。韩国、德国和台湾的一些学者亦与作者探讨过其中的内容,并进行过交流。国内南京的几所大学也索取有关资料。另外,也有一些研究者直接或间接引用其中的研究成果,由于出处不详,造成误引和误用。为了严谨起见,决定重新编辑,并正式出版。

本书的研究,由于时间跨度大,研究内容复杂,错误在所难免,敬请读者谅解。

千里之行,始于足下。对森林资源核算的研究,仅仅是个开始。相信本书会对研究、教学单位,尤其对从事国民经济核算和森林资源核算的研究者有一定的参考价值;也对从事森林资源的实际管理者和政策制定者有一定的参考价值。

在研究过程中,始终得到了翟中齐教授、侯元兆研究员二位导师的指导;并且得到了林业部经济研究中心孔繁文先生的高度评价和支持,也得到了国家统计局核算司曹克瑜处长,北京林业大学

经济管理学院刘俊昌院长、温亚利副院长、中国林业科学研究院于玲副研究员的帮助,在此表示衷心感谢!

张 颖

2001年3月8日

Preface

Since 1980' s, the problems of resource deficiency and environment deterioration have been arousing the attention of all the countries in the world. A number of countries, regions, international organizations and research institutions have input a great deal of manpower, material resources and financial resources carrying through research on these problems and seeking approaches to solving them. After researching, most of them conformably consider that economic measures must be taken to discard the conception that resources have no values. Great power must be organized to evaluate natural resources; resources depleted must be taken into line with the national economic accounting system, and resources must be protected and exploited rationally. At present, America, Canada, France, Germany, Norway, Netherlands, Britain, Japan, Indonesia, the Philippines, Costarica etc., more than 20 countries and regions have separately conducted researches on value accounting of natural resources and have made some progress on it (kong Fanwen, 1993). The statistics division of economy, social information and policy analysis of United Nations in 1994 compiled a manual of《System of Environment and Economy Integrated Accounting》, trying to link a routine economic accounts with environmental and natural accounts in national accounting system, in order to systematically depict mutuality of environment and economy in economy development and help the policy - making about society, economy and environment.

China started its research on value accounting of natural resources

from 1987(Li Jinchang, 1988) . Aided financially by World Natural Resources Institute, Ford Fund in America and other international organizations, Forestry Ministry, State Science Committee, State Statistic Bureau and Chinese Academy of Forestry etc. have got going along these research work, bring into being a definite influence on the studies at home and abroad. At present, State Statistic Bureau is making trial research on value accounting of natural resources and bringing of it in line with the national economic accounting system(State Statistic Bureau, 1997), expecting to take value accounting of environment into SNA for the future. And this forms the background for the current research together with the present author' s whole contents of doctoral and a fraction of the post - doc. dissertation in Korea University, Seoul, Korea. This book is also a result of my researches since 1994 focusing on value accounting of forest resources !

As we know, value accounting of forest resources is based on accounting of accountant and accounting of operation. Besides accounting of physical flow, the accounting of forest resources is more important. It needs some economic and natural accounts support, but we lack of research from all - sides on it, especially for value accounting of forest resources, which comes down to evaluation of forest resources. Although value estimation of forest resources started in 18 century or earlier(Yu zhengzhong, 1995), research on the evaluation of trees, forest land is always in the ascendant. But it is just for one compartment, one inventory of stands, or a certain forest and forest land. For the whole country, which include many provinces, many regions, many compartments, many stand conditions and many forest forms, there is a lack of evaluation approach. Therefore, in this book, the author begins with research on basic value estimation for forest and basic theory of

national economic accounting, to how to take the value accounting of forest to SNA etc., giving a systematic research.

This book includes three parts and 13 chapters. Part I is on the theory and techniques of value accounting of forest resources and its value into SNA; Part II detailed researches on value accounting of forest resources and its value into SNA; Part III, based on the previous researches carries through empirical researches on value accounting of forest resources domestically and overseas. These researches are based on SEEA of United Nations, taking into consideration the situation of China.

Many innovations do exist in this book and some of them have caused prevalent attention at home and abroad. Science and Technology Daily, China Green Times and Beijing Daily, all together 6 kinds of newspapers and periodicals reported some researches. Some scholars of Korea, Germany and Taiwan have discussed with this author about some of the contents. Several colleges of Nanjing in China have requested for sending some materials relevant with the research on value accounting of forest resources in this book.

In addition, some other researchers have directly or indirectly cited some the researches. Because the source is not known clearly, mistaken citings and misunderstandings have been caused. For this purpose, the author is keen on publishing this book!

In this book, due to the long research time span, the complexity of the contents, mistakes are unavoidable. Here I have to beg the understanding of the prospective readership!

Great success is an accumulation of smaller successes. It is just a beginning for the research on value accounting of forest resources in China. This book is believed to be helpful for people working in researching and teaching units, in particular for researchers who are engaging on economic accounting of nation and forest resources, as well as for supervisors and leaders of forest resources.

Once again, I want to thank for professor Zhai Zhongqi and professor Hou Yuanzhao , both of them have provided inspiring and indispensable support for this project; I also am indebted to professor Kong Fanwen, who works in Economic Research Center of Forestry Ministry for his support and stimulation. In addition, the staff performs outstandingly in this project: Cao Keyu, at State Statistic Bureau; Professor Liu Junchang and Professor Wen Yali at College of Beijing Forestry University, provided financial support. My thanks also go to assistant researcher Yu Ling, at Chinese Forestry Academe adapt some materials of the manuscript. Last but not least, Senior editor Shen Jian' s careful editing has also had a substantial effect on the final product.

I hope and expect that, this book will promote the progress of research on value accounting of forest resources and bringing of it in line with the national economic accounting system in China.

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March 2001

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