

“十五”

# 湖南林业科技发展报告

湖南省林业厅

THE DEVELOPMENT  
REPORT ON THE TENTH  
FIVE—YEAR—PLAN OF FORESTRY  
SCIENCE AND TECHNOLOGY IN HUNAN  
FORESTRY



# “十五” 湖南林业科技发展报告



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1. 2001年7月29日，湖南省副省长庞道沐与中国林科院院长江泽慧签署省院全面科技合作协议书
2. 2002年5月12日，湖南省省长张云川为受聘为湖南省政府科技顾问的中国林科院院长江泽慧和彭镇华教授颁发聘书
3. 2001年7月29日，湖南省林业厅厅长葛汉栋与中国林科院常务副院长张久荣签署省院科技合作首批示范项目协议书



1. 2002年5月12日，湖南省省长张云川在九所大礼堂主持中国林科院院长江泽慧教授学术报告会
2. 中国林科院常务副院长、首席科学家、湖南省林业厅副厅长张守攻研究员在2005年湖南科技论坛林业分会作学术报告
3. 2004年8月，湖南省兴林抑螺科研工程项目总结表彰会在长沙召开
4. 2005年12月，全省林业科技工作座谈会在怀化举行。张守攻副厅长作工作报告
5. 2005年10月30日，湖南林业发展战略研究与规划第一次专家会议在湖南宾馆举行
6. 2002年11月8日，副省长贺同新为荣获湖南首届“国际科技合作奖”的中澳耐寒桉树政府合作项目澳方首席专家诺哲博士授奖

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1. 浏阳国家级花卉苗木标准化示范基地

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2. 会同县毛竹大径材培育示范基地

3. 2003年11月,“耐寒桉树良种”项目被国家外国专家局确定为“国家引进国外智力成果示范推广基地”

4. 2003年3月,省林业厅与怀化市林业局组织科技专家送科技下乡





1. 省科技进步一等奖获奖项目“滩地杨树生长规律与造林配套技术研究”

2. 国家科技进步二等奖获奖项目“杉木林集束式树干径流测定系统”

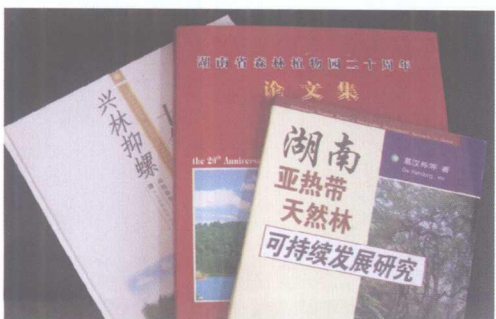
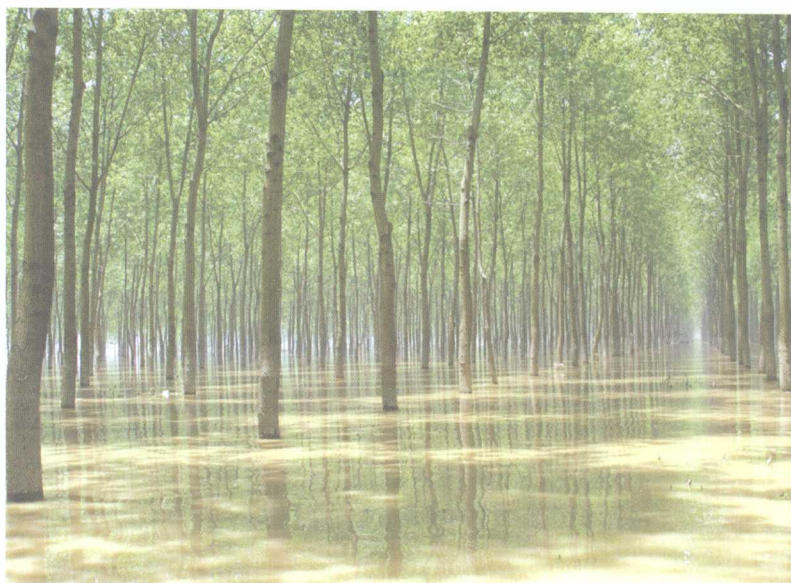
3. 岳阳君山杨树人工林碳通量观测站

4. “十五”期间著书立说成果颇丰，图为部分科技著作

5. 4年生邓恩桉人工林

6. 油茶湘林27无性系——“十五”期间推广应用最广泛的油茶良种之一

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2	5
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# 前 言

“十五”时期,是湖南林业发展最引人注目的五年,全省组织实施的退耕还林等九项林业重点工程稳步推进,林业两大体系建设快速发展,生态建设成效显著,产业发展取得丰硕成果,林业资源得到有效的保护和利用。五年间,共完成林业产业总产值 1 811.14 亿元。到“十五”期末,全省森林面积 1 018.33 万公顷,森林覆盖率 55%,森林蓄积量 3.79 亿立方米,立竹总株数 19 亿株,山区、丘陵区、平湖区农民收入来自林业的比重分别达到 40%、25%、12%。林业在国民经济建设中发挥着越来越重要的作用。

“科学技术是第一生产力”。以上这些成就的取得都离不开科技的支撑。“十五”期间,湖南林业科技工作认真贯彻落实全国技术创新大会精神和中央、省一系列发展科技的方针、政策,以自主创新为主线,紧紧围绕林业重点工程项目开展科学研究、科技推广、科技示范园区建设、标准化建设,强化国内外科技合作与交流,加快了科技体制改革和基础设施建设步伐,取得了丰硕的成果。五年间,共完成各级各类科研项目 82 项,在短周期工业原料林新品种选育与丰产培育技术研究、主要经济树种良种丰产栽培及加工利用技术研究、重点区域生态功能及林业综合技术研究、种质资源研究、野生动物保护、驯养繁殖和疾病防治技术研究、森林资源保护技术、主要花卉资源的研究开发利用、林业信息化建设等领域取得了新的进展:共实施国家、省级推广项目 119 项(次),引进和推广林木良种(优良种源、家系、无性系)146 个,推广新技术、新成果 48 项(次),营造示范林 3 000 多公顷,辐射推广面积 5 万多公顷;共制(修)定林业标准 11 项;鉴定科技成果 52 项,其中获国家科技进步奖二等奖 1 项,省科技进步奖一等奖 4 项、二等奖 10 项、三等奖 17 项。林业科技进步贡献率由“九五”期末的 28.55% 提高到 30.13%、科技成果转化率由“九五”期末的 30% 提高到 38.1%。科技兴林已成为全行业的共识,科技体制改革日益深化,科技型企业发展迅速,国内外科技合作交流领域不断拓宽,全省建成了比较完善的林业科技体系,呈现出良好的发展态势。

“十一五”是我国经济和社会发展的重要时期,也是林业大有作为的时期。“盛世兴林,科技为先”,加快林业发展必须把科技创新和科技进步作为动力。新的形势要求林业科技的发展必须坚持自主创新、重点跨越、支撑发展、引领未来。为了全面总结“十五”湖南林业科技的成绩,制定今后的发展规划,指导下一步的科技工作,我们组织编写了《“十五”湖南林业科技发展



报告》。本书分规划篇、执行篇、展望篇三部分,“十五”湖南林业科技项目等其他内容以附录形式编入。

本书编辑过程中,得到省林业厅各有关处室、各市州林业局、厅直属各有关单位、中南林业科技大学、国家林业局中南林业规划设计院等单位领导、专家、科技人员大力支持和帮助,在此一并表示衷心的感谢!

由于水平有限,编辑中难免有不当之处,敬请批评指正。

编 者

2006 年 5 月

# Foreword

During the 10th Five-Year Plan, Hunan achieved remarkable results in its forestry development. The 9 key forestry projects, including the project of reforesting the cultivated land, have been steadily promoted in the whole province; the 2 big forestry systems are under rapid construction and development; outstanding effects have been obtained in the ecological construction; great successes have been achieved in the industrial development; the forestry resources have been effectively protected and utilized. In the past five years, the whole province has realized a total forestry industrial output value of RMB 1 811.14 billion yuan. By the end of the 10th Five-Year Plan, the whole province had got a total forest area of 10.1833 million hm<sup>2</sup>, with a forest coverage of 55%, a timber storage of 379 million m<sup>3</sup> and a total upright bam-boo number of 1.9 billion, and the farmers in the mountainous area, hilly area and lake-plain area had realized forestry income proportions of 40%, 25% and 12% respectively. The forestry has played more and more important role in the construction of the national economy.

“Science and technology is the first productive force”. The above achievements are inseparable from the support of science and technology. During the 10th Five-Year Plan, Hunan seriously carried out the spirit of National Technology Innovation Conference and a series of policies on science and technology development of the central and provincial governments in its forestry science and technology work. Taking independent innovation as the main route and paying much attention to the key forestry projects, Hunan implemented scientific research, extension of science and technology, construction of sci-tech exemplary parks and zones and standardization construction, strengthened sci-tech cooperation and exchange at home and abroad, quickened sci-tech structural reform and infrastructure construction and achieved great successes. In the past five years, the whole province has finished 82 scientific research projects at various levels and categories, and has made headway in selective breeding of new strains for short-period industrial raw material forest and research of relevant high-yield cultivation technology, research of improved breed high-yield cultivation and processing and utiliza-



tion technology for main economic tree breeds, research of ecological functions and forestry comprehensive technology of key areas, research of breed quality resources, research of wild animal protection, domestication & reproduction and disease prevention & cure technology, research, development and utilization of forest resources protection and main flower & plant resources, forestry informationization construction and other fields. Hunan has implemented 119 extension projects at state and province levels, introduced and extended 146 improved tree breeds (improved breed resources, genealogies and asexual lines), extended 48 new technology and new achievement projects, and planted 3,000 hm<sup>2</sup> of exemplary forest, which has a radiation and popularization area of 50,000 hm<sup>2</sup>. Hunan has worked out or revised 11 forestry standards, appraised 52 scientific and technological fruits, among which, 1 won national second prize in science and technology progress, 3 won provincial first prizes in science and technology progress, 10 won provincial second prizes in science and technology progress and 17 won provincial third prizes in science and technology progress. The contribution ratio of forestry sci-tech progress has been raised to 30.13% from 28.55% at the end of the 9th Five-Year Plan, the forestry sci-tech achievements transformation ratio has been raised to 38.10% from 30% at the end of the 9th Five-Year Plan. Invigorating forestry through science and technology has become the common understanding of the whole industry, the sci-tech structural reform is being furthered day by day, scientific-type enterprises are enjoying rapid development, the field of sci-tech cooperation and exchange at home and abroad is being extended continuously, a fairly perfect forestry sci-tech system has been set up in the whole province and is taking on an excellent development situation.

The period of the 11th Five-Year Plan is an important period for the social and economic development of our country and also an excellent opportunity for the development of forestry. "The flourishing age invigorates the forestry, science and technology is the primary factor", we must take sci-tech innovation and sci-tech progress as the power to quicken the forestry development. The new situation demands that the forestry must realize its sci-tech development through independent innovation, key striding, support development and leading the future. In order to make an overall summary of the forestry sci-tech results achieved during the 10th Five-Year Plan in Hunan, work out the future development plan and direct the future sci-tech work,

we have compiled the Report on the Forestry Sci-Tech Development during the 10th Five-Year Plan in Hunan. Consisting of the three parts of Chapter of Planning, Chapter of Implementation and Chapter of Prospects, this book appends Hunan forestry sci-tech projects during the 10th Five-Year Plan and other content.

During the compilation of this book, we got much support and help of the leaders, experts and technicians from all divisions under Hunan Provincial Department Forestry, all municipal/prefecture bureaus of forestry, relevant units directly affiliated to Hunan Provincial Forestry Department Forestry, Central South Forestry Sci-Tech University, Central South Forestry Planning and Design Institute under State Forestry Administration and other units. For their support and help, we hereby extend our cordial thanks to them.

We sincerely hope readers to point out and correct any mistake in the book.

The compiler

Dated in May 2006



# 目 录

## 前 言

## 规 划 篇

关于下发“湖南省林业科技发展‘十五’计划和 2015 年远景规划”与“湖南林业科技创新体系建设方案”的通知 .....	( 1 )
湖南省林业科技发展“十五”计划和 2015 年远景规划 .....	( 2 )
湖南林业科技创新体系建设方案 .....	( 16 )
湖南省人民政府中国林业科学研究院全面科技合作协议书 .....	( 30 )
湖南省人民政府中国林业科学研究院全面科技合作首批示范项目协议书 .....	( 32 )
湖南省人民政府中国林业科学研究院全面科技合作总体方案 .....	( 34 )
大力推进科技进步为实现湖南林业跨越式发展作贡献 .....	( 41 )

## 执 行 篇

湖南省“十五”林业科技发展总结报告 .....	( 53 )
湖南省林业生态研究“十五”专题报告 .....	( 60 )
杉木林生态系统的功能与过程研究 .....	( 62 )
中国森林生态网络体系建设岳阳试验点研究 .....	( 64 )
中国森林生态网络研究沅江试验点专题研究 .....	( 66 )
植物精气研究 .....	( 68 )
湖南植物种质资源收集引种与利用“十五”科技专题报告 .....	( 72 )
湖南省能源植物和生物燃料油研究“十五”专题报告 .....	( 74 )
湖南省油茶“十五”科技专题报告 .....	( 78 )
湖南省速生丰产林“十五”科技专题报告 .....	( 80 )
湖南省毛竹“十五”科技专题报告 .....	( 82 )
湖南省林产工业“十五”科技专题报告 .....	( 86 )
湖南省主要花卉资源“十五”科技专题报告 .....	( 87 )

湖南省林业有害生物防治检疫“十五”科技专题报告 .....	( 89 )
湖南省林木无性系育种重点实验室“十五”建设专题报告 .....	( 90 )
湖南省林业“3S”技术应用“十五”专题报告 .....	( 94 )
湖南省林业科学院“十五”林业科技工作报告 .....	( 96 )
湖南省森林植物园“十五”林业科技工作报告 .....	( 103 )
中南林业科技大学“十五”林业科技工作报告 .....	( 105 )
湖南环境生物职业技术学院“十五”林业科技工作报告 .....	( 109 )
长沙市“十五”林业科技工作报告 .....	( 112 )
张家界市“十五”林业科技工作报告 .....	( 115 )
岳阳市“十五”林业科技工作报告 .....	( 121 )
湘西自治州“十五”林业科技工作报告 .....	( 124 )
常德市“十五”林业科技工作报告 .....	( 126 )
益阳市“十五”林业科技工作报告 .....	( 131 )
怀化市“十五”林业科技工作报告 .....	( 132 )
娄底市“十五”林业科技工作报告 .....	( 136 )
邵阳市“十五”林业科技工作报告 .....	( 139 )
湘潭市“十五”林业科技工作报告 .....	( 141 )
株洲市“十五”林业科技工作报告 .....	( 144 )
永州市“十五”林业科技工作报告 .....	( 146 )
衡阳市“十五”林业科技工作报告 .....	( 150 )
郴州市“十五”林业科技工作报告 .....	( 153 )

## 展 望 篇

湖南省林业科技发展“十一五”和中长期规划(2006~2020 年) .....	( 157 )
湖南省林业科学院“十一五”科技发展思路 .....	( 175 )
湖南省森林植物园“十一五”科技发展思路 .....	( 178 )
中南林业科技大学“十一五”科技发展思路 .....	( 180 )
湖南环境生物职业技术学院“十一五”科技发展思路 .....	( 182 )
长沙市“十一五”林业科技发展思路 .....	( 184 )
张家界市“十一五”林业科技发展思路 .....	( 186 )
岳阳市“十一五”林业科技发展思路 .....	( 188 )
湘西自治州“十一五”林业科技发展思路 .....	( 191 )
常德市“十一五”林业科技发展思路 .....	( 194 )
益阳市“十一五”林业科技发展思路 .....	( 197 )
怀化市“十一五”林业科技发展思路 .....	( 198 )
娄底市“十一五”林业科技发展思路 .....	( 201 )
邵阳市“十一五”林业科技发展思路 .....	( 204 )



湘潭市“十一五”林业科技发展思路 .....	( 206 )
株洲市“十一五”林业科技发展思路 .....	( 208 )
永州市“十一五”林业科技发展思路 .....	( 211 )
衡阳市“十一五”林业科技发展思路 .....	( 215 )
郴州市“十一五”林业科技发展思路 .....	( 216 )

## 附 录

“十五”期间湖南林业科技研究项目表 .....	( 219 )
“十五”期间湖南林业科技推广项目表 .....	( 230 )
“十五”期间湖南林业科技标准项目表 .....	( 233 )
“十五”期间湖南林业科技有关规划、考察及其它项目表 .....	( 234 )
“十五”期间湖南林业科技获奖项目表 .....	( 237 )
关于表彰全省林业科技工作先进单位和先进个人的决定 .....	( 239 )
湖南省林业科技发展现状与对策调研报告 .....	( 241 )
AHP 法计算湖南省“十五”林业科技进步贡献率 .....	( 250 )
AHP 法计算湖南省“十五”林业科技成果转化率 .....	( 259 )

# Contents

## Foreword

## Chapter of Planning

Notice on Issuing “the 10 <sup>th</sup> Five-Year Plan and 2015 Long-Range Plan on the Forestry Sci-Tech Development in Hunan Province” and “Plan on the Construction of Forestry Sci-Tech Innovation System in Hunan” .....	( 1 )
The 10 <sup>th</sup> Five-Year Plan and 2015 Long-Range Plan on the Forestry Sci-Tech Development in Hunan Province .....	( 2 )
Plan on the Construction of Forestry Sci-Tech Innovation System in Hunan Province .....	( 16 )
Agreement on the Overall Sci-Tech Cooperation between Hunan Provincial People’s Government and Chinese Academy of Forestry Science .....	( 30 )
Agreement on the First-Batch Exemplary Projects for the Overall Sci-Tech Cooperation between Hunan Provincial People’s Government and Chinese Academy of Forestry Science .....	( 32 )
General Plan on the Overall Sci-Tech Cooperation between Hunan Provincial People’s Government and Chinese Academy of Forestry Science .....	( 34 )
Devote Major Efforts to Promoting Sci-Tech Progress to Realize Striding Development of the Forestry of Hunan .....	( 41 )

## Chapter of Implementation

Summary Report on the Forestry Sci-Tech Development during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 53 )
--	--------

Monographic Report on the Study of Forestry Ecology of the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 60 )
Study on the Function and Course of the Ecological System of Fir Forest .....	( 62 )
Study on the Construction of Chinese Forest Ecological Network System at Yueyang Experimental Point .....	( 64 )
Special study on the Chinese Forest Ecological Network System at Yuanjiang Experimental Point .....	( 66 )
Study on the vital substance of plants .....	( 68 )
Summary Report on the Plant Species Resources' Collection , Introduction and Utilization during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 72 )
Monographic Report on the Study of Energy Plants and Biological Fuel during the 10 <sup>th</sup> Five-Year Plan of Hunan Province .....	( 74 )
Monographic Report on the Science and Technology of Oil Tea during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 78 )
Monographic Report on the Science and Technology of Fast-growing High-Yield Forestr during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 80 )
Monographic Report on the Science and Technology of Mao Bamboo during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 82 )
Monographic Report on the Science and Technology of Forestry Industry during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 86 )
Monographic Report on the Science and Technology of Main Flower & Plant Resources during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 87 )
Monographic Report on the Science and Technology in Prevention, Cure and Quarantine of Injurious Organisms during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 89 )
Monographic Report on the Construction of Key Labs for Clone Breeding of Trees during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 90 )
Monographic Report on the Application of "3S" Technology during the 10 <sup>th</sup> Five-Year Plan in Hunan Province .....	( 94 )
Report on the Forestry Science and Technology during the 10 <sup>th</sup>	