

中国植被及其地理格局

——中华人民共和国植被图(1:1 000 000)说明书

(上卷)

中国科学院中国植被图编辑委员会 编纂

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内 容 提 要

《中华人民共和国植被图》包含中国植被图(1:1 000 000)60幅、中国植被区划图(1:6 000 000)1幅及两图的说明书即《中国植被及其地理格局》。中国植被图(1:1 000 000)是现状植被类型图,表示了中国11个植被型组、55个植被型、960个植被群系和亚群系,以及2000多个群落优势种、主要农作物和经济作物的地理分布,并反映出许多植被单位与土壤和地表基质的关系。中国植被区划图(1:6 000 000)表示了中国植被的区域分异状况,将全国划分为8个植被区域、116个植被区和464个植被小区。图件说明书介绍了中国植被的地理分布格局、植被分类原则和分类系统,植被群系和亚群系的主要植物种类组成、群落特征、生境条件、生态地理分布和简要经济评价;说明了各区划单位的地理位置、自然地理条件、植被组合特点、植被的合理利用和改良的建议。本图件经电子数字化后制成了电子地图和建立了植被信息系统数据库,可对所有图幅作任意拼接、裁剪、缩放、叠加变色、标识,可对各地图要素进行检索、提取、测算、统计,可用数学模型计算并生成有关专题图件,或与自然和社会等各种对应地理要素作相关多元分析及模型显示,并可对图件内容进行快速修改和地图更新。《中华人民共和国植被图》是反映中国自然资源、自然条件以及生态和地理环境的重要基础图件,是研究全球变化、生物多样性、环境保护与监测等必不可少的基础资料和依据,是全国农业、林业、畜牧业区划与规划,县级以上行政单元和大中流域经济规划、地域性工程建设、中近距无线电通讯、军事、科研和公众教育等的必备参考资料。

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序 一

人类生活在地球这个巨大的生态系统之中，植物是该生态系统中的第一性生产者，人和动物的生存都离不开植物。植物是生态系统中物质与能量循环中重要的而且是不可缺少的一环，属于地球上最活跃最复杂的一个圈层。植物与植物之间，以及植物与环境之间，存在着相互制约和相互促进的密切联系。不同物种的植物及其在不同的生态环境中所起的作用各不相同，并以植物群落的形式出现在地球上。各种植物群落的总体则构成了地球上的植被。

植被与地质、地貌、气候、水文、土壤、动物界和微生物界共同构成自然地理环境，而植被又是最能综合反映其他要素的性质和特点的指示者，因此它是最敏感的自然地理环境要素。

人类的生活和生产活动，都直接或间接地与植被发生密切关系。无论农业、林业、畜牧业以及有关各业的生产活动，公园、保护区和自然区域管理，环境污染状况的评估以及环境治理工程的实施等，都是以植被作为基础资料或者将植被作为规划设计的主体。


中国南北纵跨寒温带、温带、暖温带、亚热带和热带，东南濒临太平洋，西北深入欧亚大陆腹地，加之山地和高原占国土面积的三分之二以上，因而形成了复杂多样的植被和独特的水平地带性及垂直地带性分布特点。同时中国有几千年的农业发展历史，栽培植被丰富多彩。在国土如此广阔，自然条件和植被如此复杂的国家编制百万分之一比例尺植被图，是一项艰巨的研究任务，它的完成和出版是对我国和世界植被制图事业的极大贡献。

本图件包括四开本大型地图册一本，两卷说明书，电子地图和植被数据库等四个组成部分，是我国目前形式最完备、内容最浩繁的植被图件，它精确反映了我国 960 个植被类型单位和 464 个植被区划单位的分布状况和分布规律，以及栽培植被的 7 大耕作制度和近 30 个作物类型组合，并且配有详细文字说明。地图内容的电子数字化和数据库的建立，使本图的研制和出版进入了植被制图的国际先进行列，这不仅有助于我国植被的继续深入研究，而且对全球环境变化和我国农林牧业研究和发展，以及环境科学研究和环保工程设计具有重要意义，并且为本图的阅读和使用提供了极大的便利。

我自上世纪 50 年代曾一度涉足植被制图，并有滥觞之作，嗣后仍然继续研究过植被，但更多地致力于植物区系地理和植物资源研究。我后来的这些研究工作其实与植被制图研究是有密切关系的，也是为植被研究服务的，尽管能力有限，服务的不够，但因为它们都明显地具有基础性和应用性的双重特点，因而长期以来我一直关注着我国植被制图事业的发展。能于跨世纪苍颜白发

之年得睹如此完备的《中华人民共和国植被图(1:100万)》研制成功,感到十分喜悦,相信此图件出版之后,定能在生物学界、地学界和环境学界产生深远影响,成为我国重要的社会、文化和科学历史文献,并为世界有关科学领域所注目。

中国科学院院士

Handwritten signature in black ink, reading '吴征镒' (Wu Zhengrong).

2006.1.20

Foreword I

Human beings live on the gigantic ecosystems of this Earth on which plants are the primary producers. Man and other animals could not live without plants which constitute an indispensable linkage between nutrient circulation and energy transfer among different components in an ecosystem, and which are the most important part of the active and complicated biosphere. There are tight and close associations in an ecosystem as well in the entire biosphere through which mutual interactions and constraints among plants themselves and between plants and their physical environment pose both enhancing and restricting interrelationships in this planet Earth. Different plant species play distinct roles in various ecosystems, and they come into being in the form of communities. The totality of various plant communities forms the enchanting vegetation types on the Earth.

The vegetation, fauna and microbial organisms relentlessly and incessantly interact with their abiotic physical environments, including the geology, topography, climate, hydrology and soil. Together, they form the natural geography in a given area. Amongst these factors, vegetation is the very indicator that can mirror the comprehensive and all-embracing properties and characteristics of other factors, and therefore, it is the most sensitive factor of the local natural biogeography.

The life and production activities of human beings have direct and indirect relationships with vegetation. Vegetation is the foundation of all anthropogenic activities. Agriculture, forestry, animal husbandry and other production activities are practiced based on vegetation data. The management of parks, nature reserves and wilderness areas, as well as the assessment of environmental pollution and the implementation of environmental remediation projects have to take the local vegetation as the focal subject of master planning.

Cool temperate, warm temperate, subtropical and tropical zones are found from the north to the south. The diversity of vegetation types in China can be accredited to the fact that the Pacific Ocean lies to the southeast, while the northwestern part stretches deep into the hinterland of the Eurasian continent. Moreover, mountainous areas and plateaus occupy approximately two thirds of the territory. Taken together, all these factors have contributed to the extremely high diversity of vegetation in China, which is characterized by unique vertical and horizontal distribution patterns. China also has a thousand years of agricultural history, with many types of cultivated vegetation. Therefore, it is a daunting task to compile 1 : 1 000 000 vegetation map, given the vastness of the territory and the complexity of natural environmental conditions and vegetation types. Therefore, the completion and publication of this vegetation map are a great contribution to the cause of vegetation cartography and

mapping in China as well as in the world.

This atlas includes a quarto-sized large atlas, a two-volume guide book, an electronic version of maps and a vegetation database. The atlas contains the most complete information in terms of both vegetation types and accompanying detailed explanations, precisely reflecting the most updated distribution status and patterns of the 960 vegetation classification units and 464 vegetation regionalization units. In addition, 7 main farming systems and nearly 30 cultivated crop combinations are included. The electronic version of the atlas contains digitized vegetation data, and the metadatabase gives the users original information that can be further analyzed. The completeness of this atlas clearly indicates that vegetation research and publication in China have reached the world front. This atlas is undoubtedly of great importance in helping in-depth studies of Chinese vegetation, in promoting environmental studies and in designing environmental protection projects. Furthermore, this atlas provides great ease and advantage for the readership and users.

I have been involved in the mapping of vegetation in China since the 1950's and have published some work on vegetation mapping. Since then, my work has shifted to study vegetation and flora and my main focus has been on studying plant biography and plant resources. In fact, my studies since the 1950's have been closely related to vegetation mapping, and they serve as the basis of vegetation mapping. Obviously, vegetation mapping is both a basic and an applied research field, so it has dual features. Therefore, I have a long-standing interest in vegetation mapping albeit my abilities are limited and my services to this profession would have been more. As a nonagenarian, it is a delight to witness the successful publication of the complete Vegetation Map of People's Republic of China (1 : 1 000 000) at the turn of this century. I believe that this work is bound to have far-reaching impact in the academic communities of biosciences, geosciences and environmental sciences. This atlas will also become a milestone of social, cultural and scientific literature, and will draw the attention of scientists in related fields of the world.

Academician of Chinese Academy of Sciences

Wu Zhengyi

January 20, 2006

序 二

回顾上世纪五十年代至七十年代的三十年间,我国科技工作者对国家的各类农业资源进行了广泛的考察研究,特别是对西部、南方和东北北部进行的大规模综合考察,取得了丰富的资料,但由于在各类考察中所采用的方法和评价原则存有差异,加上资料散存于不同单位和人员手中,应用起来多有不便,许多科学问题得不到满意的解决。因此摆在中国科技界面前的一项迫切任务就是在原有基础上,进一步补充考察,总结提高,以便提出一套符合客观实际,便于各级决策者、有关科研人员和实际工作者所使用的,按统一标准反映各类农业自然资源数量与质量的科学资料。

在七十年代后期,科学的春天来临之际,经过多方论证,认为编制一系列的自然资源地图,是实现这一目标的最佳途径。编图过程必将是进一步完善资源分类体系、统一评价标准、阐明分布规律的过程。通过图件形式可以得出比较准确的各类资源的数量、质量数据。因此,编制一套各类农业自然资源地图的任务,便顺理成章地被列为《一九七八年至一九八五年全国科学技术发展规划纲要》重点科学技术研究项目的第一项。规划纲要要求对重点地区气候、水、土地、生物资源以及生态系统进行调查研究,提出合理开发利用和保护的方案;制订因地制宜的发展社会主义大农业的农业区划。全国1:100万植被类型图、1:600万中国植被区划图及其说明书,就是该规划纲要第一项任务的重要组成部分。

本图的研制,动员了国内植被和植物生态学有关单位的人员参加,并得到了有关领导部门大力支持。

本图的前期研制,是在我国著名植物生态学家侯学煜学部委员主持下进行的。上世纪90年代开始的后期研制和植被图及其说明书统编,是在张新时院士主持下进行的,此时国际上发达国家出现了以计算机技术为主导的“数字地球”新趋势,该技术被及时地运用到本图研制,实现了本图件的电子数字化,从而将本图件的科学和应用价值及使用的方便程度大大增加,标志着我国大中比例尺专题地图研制步入新的发展阶段。

《中华人民共和国植被图(1:100万)》四开本大型图册一本,该图说明书——《中国植被及其地理格局》两册,该图的电子地图和数据库,是全国植被生态学和植被地理学界两百余位科学家自上世纪五十年代起近半个世纪实地考察和精心研究的科学成果,它反映了我国植被的基本特点和地理分布、独特的分布规律和基本分布格局,该图内容丰富详实、数据可靠,便于应用,它的研制成功和出版发行,代表着我国植被生态学和植被地理学新的研究水平。

在自然资源各专题图件中，植被图的内容较为综合和广泛。本图件与1:100万的《中国土地利用图》、《中国土地资源图》、《中国草场资源图》和《中国土壤图》等配合应用，将更有利于对我国自然资源作出科学评价，从而为自然资源的可持续发展起到促进作用，并可为区域规划、环境监测，以及自然灾害防治等提供可靠的基础科学资料。本图件的出版发行，还将有利于与遥感及定位研究的适时研究成果和数据进行对比研究，及时更新植被图内容，并监测植被的变化动态，提供植被的前瞻性研究成果，我相信本图件的出版必将对我国科学技术的发展和国民经济的现代化进程发挥积极的促进作用。

中国科学院院士

2006年4月



Foreword II

Looking back to the three decades from the 1950s to the 1970s, Chinese scientists made large-scale, comprehensive surveys of various agricultural resources, particularly in the western, southern and northeastern regions of China. The immense amount of data collected during time is impressive. Nevertheless, it has been inconvenient to get access to these data and many scientific problems remain unresolved because the investigation methodologies and evaluation principles were inconsistent, and the original data were scattered among investigators from different sectors. Therefore, one of the urgent tasks in front of the scientific community in China was to conduct additional investigations and summarize the existing information on the basis of previous surveys. The data should represent reality and should be easy to use by policy makers of different hierarchical levels, scientists and practitioners. Furthermore, they should be standardized and truly reflect the quantity and quality of various agricultural resources.

In the late 1970's, at the time of the Spring of Science, we reached a consensus through many debates that compiling a series of natural resource maps was the best way to achieve these goals. The process of compiling maps is the best way to consummate the resource classification system, unify the evaluation methods and clarify the vegetation distribution patterns. The atlas should accurately point toward the quantity and quality of a variety of natural resources. Thus, the task of compiling an atlas of natural resources was favorably listed as the number one project in the National Scientific and Technological Development Program from 1978 to 1985. According to the program, the climate and water, land and biological resources along with various ecosystems in key areas were prioritized for investigation, so as to set forth plans for rational development and conservation and to formulate classification systems of macroagriculture that could best be in line with the local conditions. The vegetation map (1 : 1 000 000) and the China Vegetation Regionalization Map (1 : 6 000 000) with accompanying instruction books were the key parts in this program.

Many vegetation scientists and plant ecologists from different institutions and universities were mobilized to take part in the compilation of this atlas. This project also gained support from competent authorities from beginning to end. Hou Xueyu, a famous plant ecologist, launched and chaired the compilation of the atlas during the early stage. Since the early 1990's, Academician Zhang Xinshi has undertaken this heavy task and has since chaired this project. At that time, a new trend of the so-called digital earth, indicated by the widespread application of computer technologies, emerged in developed countries. Professor Zhang and his group immediately applied this newly developed

technology to vegetation mapping and brought about the digitization of this atlas. The application of computer techniques in vegetation mapping undoubtedly enhanced the values of this atlas both for scientific research and application, particularly in terms of its ease of use, signifying that the large- and meso-scale vegetation mapping in China has entered a new developmental stage.

There are a quarto-sized large atlas of Vegetation Map of People's Republic of China (1 : 1 000 000) , a two-volume instruction book entitled China's Vegetation and Geographical Patterns, an electronic map and a metadatabase. This great work is a result of almost 50 years hard field work and research by over 200 vegetation scientists and plant biogeographers, and it reflects the basic characteristics of China's vegetation and its unique distribution patterns. This atlas contains full and accurate information, solid and reliable data, and is easy to use. Its successful study and publication symbolize a new research level in vegetation ecology and vegetation biogeography in China.

Among all the topical maps of natural resources, vegetation maps are uniquely characterized by being more comprehensive and broader in content. This atlas can be used in combination with other 1 : 1 000 000 scale maps, including China's Land Use Map, Land Resources Map, Rangeland Resources Map and Soil Resources Map. By doing so, it will be conducive to scientific research and to promoting the sustainable development and utilization of China's natural resources. It also contains a massive amount of information that can be used for regional planning, environmental monitoring and disaster prevention. The publication of this atlas can also help carry out contrast studies combining remotely sensed data with long-term ground survey information, update the contents of vegetation maps in a timelier manner and provide up-to-date information on cutting edge vegetation research. I believe that the publication of this atlas will surely promote the development of science and technology and actively hasten the modernization processes of the national economy in China.

Academician of the Chinese Academy of Sciences

Sun Honglie

April 2006.

前 言

中华人民共和国植被图(1:1 000 000)和中国植被区划图(1:6 000 000)是《一九七八年至一九八五年全国科学技术发展规划纲要》108项重点项目第一项《农业自然资源和农业区划研究》的一级研究课题;同时也是《一九七八年至一九八五年全国自然科学学科规划》地学重点项目第5项《水、土资源和土地合理利用的基础研究》的一级研究课题。

1978年8月21日至9月6日,原国家科委、中国科学院、前农林部在山东泰安召开“农业自然资源和农业区划研究会议”,决定由中国科学院植物研究所主持全国植被图和植被区划图研究项目。

1979年3月,前国家农委、原国家科委和中国科学院正式下达研究项目。项目任务要求是:“研究中国植被分类原则、系统、级别和植被图图例系统,各省(市、区)编制1:100万或更大比例尺植被图和说明书,并汇编全国1:100万植被图和说明书”;“划分植被区,分区说明各植被区域的植被类型的生态地理分布规律,对植被资源进行评价,提出因地制宜发展农、林、牧、副业和利用资源植被的意见”。

1979年4月,前国家农委、原国家科委、前农林部、中国科学院在北京召开“全国农业自然资源调查和农业区划工作会议”,对中国植被图和中国植被区划工作进行了部署。

1979年6月,中国科学院植物研究所在北京召开“中国植被图和中国植被区划工作会议”,中国科学院有关研究所和20多省(区)的高等院校和研究机构近30个单位40余人参加会议。会议讨论并决定了参加工作的人员和任务分工,制订了工作计划,决定成立以侯学煜为主编的中国科学院中国植被图编辑委员会,编委会办公室设在中国科学院植物研究所。后经多次酝酿协商,1983年12月正式确定了编委会组成人员名单。中国植被图编辑委员会是编制本图件的组织和执行机构,编委会办公室为办事机构。

因侯学煜主编于1991年病逝,1995年5月2—4日在北京举行的“中国植被图工作会议”决定由张新时任编委会第一副主编兼项目负责人,并确认了历年多位常委的增补;2000年3月10日,中国科学院植物研究所根据工作需要,决定张新时任主编,并对编委会作了适当调整。

1980年11月,编委会召开“全国植被分类、分区及制图工作会议”,提出了《中国植被图、植被区划图编制规范(草案)》和《中国植被分类系统(草案)》。其中对栽培植被提出以耕作制度和作物类型组合为分类标准的意见,对植被区划则明确划分至植被小区。

1985年3月,编委会召开工作会议,讨论了各省区制图工作进展情况,决定按全国6大区进行图幅的接边拼幅,明确了图件统编的工作步骤等。

1988年3月,编委会召开主编扩大会议,进一步讨论和修改了图例系统,商定按1:100万地理底图接边拼幅的工作方式和人员分工。

1995年4月,编委会召开“全国植被区划与植被制图工作会议”,对中国植被区划标准和方案统一了意见,对植被图、植被区划图和两图说明书统编作了安排,决定从速进行图件的电子数字化工作,并力争同时出版电子版和印刷版。

2000年5月,编委会召开主编扩大会议,决定了图件说明书统编的具体分工、工作计划和全面完成本图件各组成部分—植被图、植被区划图及两图说明书和图件数字化的具体要求。中国科学院植物研究所时任所长韩兴国在会上强调,本图件的出版“要以最新最好的形式表现出来,以适应国民经济和科学发展的需要。要抓紧工作,按照中国科学院于1998年3月下发的任务书(含中国植被图、植被区划图及说明书的印刷版和电子版)的质量要求,尽快完成全部研制工作并交付出版”。

2001年5月,作为阶段性成果的《1:1 000 000中国植被图集》出版。

2007年5月,编委会召开主编扩大会议,张新时主编主持讨论图件及说明书定稿,演示并讲解“植被信息系统”主要功能。中国科学院生命科学与生物技术局康乐局长、中国科学院植物研究所马克平所长等出席会议并作重要发言,对即将付梓图件及说明书和“植被信息系统”予以高度评价,对进一步的工作提出了积极的建议。

图件编制工作进度及具体完成时间:1994年底完成分省区植被图39幅,1995年完成全部图稿60幅;1995年6月开始植被图统编,1996年9月完成初步统编;1998年10月完成植被区划图分省区图稿,1999年6月初步完成统编。1998年12月基本完成分省区图件说明书并开始统编,在统编过程中同时协调修改植被图、植被区划图和说明书,2004年6月完成说明书统编与图件修改(包括总图图例调整)。1999年1月开始植被图和植被区划图数字化工作,2005年5月完成。2005年6月全部图件及说明书交付出版单位。此后,与出版单位反复磋商纸质图件及说明书数字化过程中和“植被信息系统”研发过程中的技术问题,直至达到预期设想并符合出版要求。

中华人民共和国植被图(1:1 000 000)是中比例尺现状植被图,编制时间跨度较大,大致反映了20世纪80—90年代中期的植被分布状况。东部农业发达地区植被受人类活动干扰严重,对于个别有特殊科学意义而目前表现面积过小的植被类型,在部分地点以复原植被或潜在植被方式表示。本图表明了中国11个植被类型组、55个植被类型,960个群系和亚群系(包括自然植被和栽培植被),以及2000多个群落优势种、主要农作物和经济作物的地理分布,反映出许多植被单位及优势种与土壤和地面基质的密切关系。图件说明书介绍了中国植被的地理分布格局,植被分类原则和系统,植物群系或个别亚群系的主要植物种类组成、群落特征、生境条件、生态地理分布和简要经济评价。

中国植被区划图(1:6 000 000)详细反映了中国植被的区域分异特点,将8个植被区域划分为116个植被区和464个植被小区。图件说明书阐明了各区划单元的地理位置、自然地理条件、植

被组合特点及植被改良和合理利用的建议。

上述图件及说明书(222万字+168面照片图版)均经数字化后刻录成光盘,可通过计算机进行多种方式阅读。植被类型、区划(植被区划与行政区划)信息已构建三维空间(经度、纬度与海拔高度)电子数据库,贮存于高密度光盘。自主研发的“植被信息系统”(VIS)可通过计算机对所有图幅实现任意拼接、裁剪、缩放、叠加变色、标识等功能;可对图内各要素进行检索、提取、测算与统计、图表化;可使用数学模型进行计算并生成专题图件,或与空间上相对应的其它地理要素(地形、气候、土壤、区划、遥感信息、社会经济指标等)进行多元分析和模型图形显示;此外,在取得新的植被类型与分布空间资料时,可及时对数据库作修改补充,并可在本图数据库基础上按照规定时期对图件快速更新,极大地扩展了图件的功能。

植被是重要的自然资源和地理要素。中国植被图是反映中国自然资源、自然条件和地理环境的重要基础图件,是研究全球变化、生物多样性、环境保护与监测等必不可少的重要基础资料和依据,是全国农业、林业、畜牧业区划与规划,地区以上行政单元和大中流域经济规划、地域性工程建设、中近距无线电通讯、军事、科研和公众教育必备的重要参考资料。

中国植被图在科技进步、经济建设与社会发展方面具有重要科学价值和实用价值,是反映科学、文化和历史的重要文献。

图件的编制和出版得到政府主管部门和相关机构的大力支持和有效资助。科学技术部、国家发展和改革委员会、国家自然科学基金委员会、中国科学院和华夏英才基金会均在图件编制过程中分阶段给予了重点资助,省区科技厅、农业厅、林业厅等主管部门均对所在省区的植被图协作组予以不同程度和不同方式的资助,在此诚致谢忱。

在图件研制过程中,承蒙中国科学院路甬祥院长,陈宜瑜、陈竺副院长,秦大河、王贵海、康乐局长的高度关注和大力支持;得到中国科学院植物研究所韩兴国、马克平、傅德志、赵星武、马存仁、李良千、洪亮等先生的关心和支持;在该图件出版之际,吴征镒院士、孙鸿烈院士百忙之中为本图件作序,在此谨致谢忱。

中国自然环境复杂、国土辽阔、植被类型丰富多样,在许多地区人类活动干扰严重,加之实地植被调查工作在各地不尽平衡,编制过程漫长曲折,付梓图件难免尚存问题与不足,敬请广大读者与识者不吝赐教,以期修订、补充与完善。

正如1980年问世的《中国植被》,中国植被图和中国植被区划图乃集全国植被学者与“农、林、牧”诸领域专家集体辛劳之大作,全体编著者谨以此呕心沥血之作献给祖国,并深切纪念为此做出重大贡献的已故侯学煜主编,胡式之、李博、何绍颀副主编和李世英教授。

中国科学院中国植被图编辑委员会

2007年5月

Preface

The Vegetation Map of People's Republic of China (1 : 1 000 000) and Vegetation Regionalization Map of People's Republic of China (1 : 6 000 000) were the first class projects among the 108 key research projects in the National Scientific and Technological Development Program from 1978 to 1985, which were subprojects embraced in the Agricultural Resources and Agricultural Regionalization. In addition, they were also the first class projects of the Basic Research on Water, Land Resources and Rational Land Uses which belonged to the fifth item of the National Natural Science Plan from 1978 to 1985.

From August 21 to September 6, 1978, the former National Science and Technology Commission, the Chinese Academy of Sciences and the former Ministry of Agriculture and Forestry held the Meeting on Agricultural Resources and Agricultural Regionalization in Tai'an, Shandong Province, in which the Institute of Botany, the Chinese Academy of Sciences, was assigned as the leading institution to compile the vegetation map and vegetation regionalization map.

In March 1979, the former Agricultural Commission, the former National Science and Technology Commission and the Chinese Academy of Sciences formally and officially approved the project. It was required that "this project should study the vegetation classification principles, classification systems, levels of classification and the legend system of the vegetation map; at the provincial, autonomous regions and municipal city levels, vegetation maps (1 : 1 000 000) and accompanying instruction books should be compiled, and a final compilation of a national level vegetation map (1 : 1 000 000) should be completed". It was also required that "the project should be designated to classify the vegetation zones, to clarify and explain the ecological geographical distribution patterns of vegetation types in different vegetation zones, to evaluate the vegetation resources and to put forward proposals and recommendation with regard to the development of agriculture, forestry, animal husbandry, sideline occupation and the use of vegetation resources."

In April 1979, the Meeting on the Agricultural Natural Resources Surveys and Agricultural Regionalization was held in Beijing. This meeting was organized by the former National Agricultural Commission, the former State Science and Technology Commission, the former Ministry of Agriculture and Forestry and the Chinese Academy of Sciences, during which the major tasks on the vegetation map and vegetation regionalization were assigned.

In June 1979, the Institute of Botany, the Chinese Academy of Sciences, held the Working Meeting on Vegetation Map and Vegetation Regionalization of the People's Republic of China. Over 40 participants from nearly 30 research institutions belonging to the Chinese Academy of Sciences,

the universities and other research organizations attended the meeting. Participants of this meeting discussed many issues, and made several important milestone decisions related to this gigantic work. During this meeting, the potential participants and undertakers of this work, as well as the division of tasks, were discussed and arranged; the working plan was formulated. Meanwhile, it was decided to establish an Editorial Board of China Vegetation Map of the Chinese Academy of Sciences. The Board was chaired by Professor Hou Xueyu, who also served as the Editor-in-Chief, and it was decided that the Editorial Office was to be headquartered within the campus of the Institute of Botany, CAS. Through a great deal of consultations and discussions, the final Editorial Board was confirmed in December 1983. The Editorial Board was to take the responsibility for organizing and implementing the compiling tasks, and the Editorial Office was the standing administrative body.

Professor Hou Xueyu, the Editor-in-Chief of the atlas, passed away in 1991. During the Meeting on China's Vegetation Map held from May 2 to 4, 1995, Dr. Zhang Xinshi was recommended and appointed as first Deputy Editor and president, and the newly added Standing Editorial Board members were affirmed. On March 10, 2000, the Institute of Botany officially appointed Dr. Zhang Xinshi as the new Editor-in-Chief based on work needs and adjusted the Editorial Committee accordingly.

In November 1980, the Editorial Board held the Meeting on National Vegetation Classification, Regionalization and Mapping, in which China's Vegetation Map and Vegetation Regionalization Compilation Standard (draft) and China's Vegetation Classification System (draft) were proposed. These drafts stipulated that farming systems and crop type combinations should be incorporated into the classification standard for cultivated vegetation, and the vegetation regionalization should be divided to the scale of small regions.

In March 1985, the Editorial Board held a working meeting. Working progresses made by different provinces, autonomous regions and municipalities were discussed, and it was also decided to put together the entire map based on the six large regions of the entire country. At the same time, a timetable for map compilation and finalization was specified.

In March 1988, the Enlarged Editorial Board Meeting was held, during which the legend system was further discussed and revised. It was decided that a 1 : 1 000 000 base map should be used to put together all the regional maps and rearranged the division of tasks to different undertakers.

In April 1995, the Editorial Board convened the Meeting on China Vegetation Regionalization and Vegetation Mapping, during which China's vegetation regionalization standards and schemes were unified, and the editing of the Vegetation Map, the Vegetation Regionalization Map and the two-volume instruction books was arranged. It was stressed that the digitization of the atlas should be expedited, and great efforts should be made to concurrently publish the electronic version and the printed version.

In May 2000, the Enlarged Editorial Board Meeting was held in Beijing. At that meeting, the participants made decisions on the detailed division of work, updated the working plan, and made