

Preface

With the coming of 21st century, what is the future of humankind should be a question to everybody in the world to think deeply. President Jiang Zemin of China had pointed out that the Knowledge Economy is emerging. In the worldwide discussion on new economy from the beginning of new Millennium, it is becoming a common thought that Knowledge Economy system could meet the requirements of world advanced social production.

Dr. Wu Jisong, the author, graduated from Tsinghua University in 1968, is currently the Director-General of Department of Water Resources, Ministry of Water Resources, Managing Vice Director of National Water Saving Office, Special Assistant to the Chairman of Chinese Olympic Games Application Committee, Vice Chairman of the Organizing Committee of 6th World Conference of Science Parks (Australia, 1998) and Professor of Postdoctoral researcher in Hohai University. In the past 2 decades, he had toured over 50 states and regions, worked in 3 international organizations as a visiting scholar, project expert, diplomatic counselor and consultant.

Dated to 1984, as an expert he was in charge of the research project of UNESCO with the theme of “Multi-Discipline Studies on Application to Development”, which was one of the initial research of worldwide Knowledge Economy research, and involved in the creation of the concept of Knowledge Economy in the world. After that, as the consultant on Hi-Tech and environment in science sector of UNESCO, he continued the research and dissemination of Knowledge Economy. In February 1998, one of his articles was published, introduced the concept of knowledge economy systemically into China first time. His many years research achievements compiled in three books, which are “New Trend of 21st Century Society—Knowledge Economy”, the first book on Knowledge Economy in China with more than 280,000 sales till now and won the best seller on social-economical books in 1998, “Knowledge Economics-Theory, Practice and Application”, the first book introduced the theory of Knowledge Economy into China and “New Cell of Society in 21st Century-Science Parks”.

Concentrating his many years research on knowledge economy and plentiful practical experiences these years, he compiled this book, named of “1984—2000 My Research on Knowledge Economy and Its management from Paris to Beijing”, which is attracting broad attention in the world. Mr. Jia Qinglin, Party Secretary-general of Beijing Municipality,

Mr. R. Lubbers, Prime - Minister of the Netherlands 1982—1994 and International President of WWF, Prof. C. Freeman, Emeritus professor of Sussex University, UK, World Famous Economist and Mr. Wang Daheng, Academician of Chinese Academy of Science and Chinese Academy of Engineering had wrote foreword to this book.

北京市委贾庆林书记的序

新世纪即将来临，世界各国在经济全球化的大趋势下，展开了更为激烈的、以科技为先导的综合国力竞争。目前我国已进入了全面建设小康社会，加快推进现代化的新的发展阶段。北京以“新北京、新奥运”为口号，全力展开了 2008 年奥林匹克运动会的申办。“新北京”，新就新在发展以知识经济为方向、以高新技术产业化为核心的首都经济，大力创建首都区域创新体系。“新奥运”，新就新在申办奥运的新宗旨：绿色的、生态的奥运，科技的、知识的奥运，人文的、可持续发展的奥运。北京通过申办奥运促进知识经济的发展，也将通过知识经济的发展办好让世人耳目一新、展现中国风貌的创新奥运。

吴季松教授自 1984 年起在联合国系统参与了最早的知识经济研究与创意，16 年不辍，得到了国际知识经济和“国家创新体系”权威专家的高度评价。他的研究无疑对北京的知识经济发展有积极的作用。他的新著《1984~2000 我的知识经济及其管理研究——从巴黎到北京》，其中近半数篇章曾以英、法等文字在国外知名刊物上发表，真实地记录了一个中国学者参与知识经济创意的历程，这对于我们的奥运申办也是有十分积极的作用的。谨祝吴季

松教授在他的继续研究中不断取得成绩，发挥更大的作用。

贾逸林

2000 年 10 月 27 日

Foreword of Mr. Jia Qinglin

With the advent of new century, a more heated competition of comprehensive strength of countries with science and technology as the direction is being launched under the general trend of economy globalization. Now China is entering a new stage of development to build a middle income society with higher speed improvement of modernization. Beijing, the capital of China is carrying out 2008 Olympic Games Bid with all support with “New Beijing, Great Olympic” as the slogan. The essential of “New Beijing” means to develop knowledge economy of Beijing with industrialization of hi-tech and new technologies as the core. The connotation of “Great Olympic” is referring to the new aim of Olympic Games Bid which are Green and Ecological Olympic, Technological and Knowledgeable Olympic as well as Cultural and Sustainable Olympic. Beijing hope to accelerate the development of knowledge economy by the bid of Olympic Games, and will to organize a fresh and new Olympic to the world, demonstrating the image and creation of China through the development of knowledge economy.

Professor Wu Jisong, the author of this book had in-

involved in initial research and creation of the concept of “Knowledge Economy” from 1984 in UN system, and have been keeping on the research without any stop in 16 years. The authorities on “Knowledge Economy” and “National Innovation System” gave great evaluation to his research. It is no doubt that his research will make active impact on the development of “Knowledge Economy” in Beijing. His new book, “1984—2000 My Research on Knowledge Economy and Its management—from Paris to Beijing” with near half of articles in it were published in English and French on well-known foreign magazines is a true record of the research process of a Chinese expert on the creation of the concept of “Knowledge Economy”. The publish of this book has very active impact on the Beijing 2008 Olympic Games Bid.

I wish Professor Wu will make progresses continuously in his following research on “Knowledge Economy” and play more influential role.

Jia Qinglin

Party Secretary-general
of Beijing Municipality

27 October 2000

Foreword of Mr. R. Lubbers

There are good reasons for the republich of Knowledge Economy.

The word “Knowledge Economy” is itself intriguing.

As a professor on Globalization and Sustainable Development it reminds me of another famous book, “The Third Wave” of Alvin Tofler, as it was published at the end of the seventies.

In that book the thesis was that the new emerging technologies, that what later became known as information and communication technology (ICT), would have a profound influence on society; as profound as the first wave, when agriculture technology made it possible for humankind to settle (and not to move around all the time in search for food and living); and as profound as the second wave, when the industrial revolution (the steam driven engine and machinery and other new technological foundings) reached mass-production, factories and rural classes. Dr. Wu Jisong prefers the word “Knowledge Economy”, indicating that modernity and its economy is characterized by “knowledge”:

By choosing that title Wu Jisong makes it clear that knowledge is not “acreage” (Ricardo!), not raw resources and industrial technology (Marx) is now the key “production factor”.

Knowledge is essential for the modern economy all the way to Science Parks as Wu Jisong described, but is also when practiced as information and communication technology a key to “Knowledge society”; a society with “E-mailing networks”. This knowledge is not only relevant for the economy, but also for aspects of society. From my perspective I like to mention non-governmental organizations which I call E-mailing societies.

Wu Jisong gives special attention to developing countries. He is right.

The Knowledge Economy is the way for developing countries to mature faster, to catch-up with matured economies and even to leap-frog.

The Knowledge Economy is now spreading around the globe, although still many peoples and countries as part of countries are “excluded”.

Speaking about developing countries it is fair to say that “the catching-up” is partly in terms of industrial revolution and partly in terms of the Knowledge Economy.

The balance between the two is also important in relation with “sustainable development”.

Wu Jisong gives due attention to sustainable development.

Sustainable development is a word coined by Gro Harlem Brundtland in the famous UN-report “Our Common Future”.

It is about how to make good use of modern technology in order not to compromise the possibilities of generations yet unborn, when it comes to environment and nature. It is about inter-generational solidarity; It is about pollution, climate change and bio-diversity.

To achieve sustainable development we need best practices, constraints to safeguard environment and nature, and innovative thinking.


The Knowledge Economy invites us to practice on a new way of life. It is about achieving a just, sustainable and participatory society. [Just is about fairness, sustainable about long term thinking and participatory about the choice for each and all to participate.]

The Knowledge Economy fits in the tradition of the United Nations Conference on Environment and Development (Rio de Janeiro 1992).

Now, in the year 2000, the Earth Charter is published. This is about ethical values that has to inspire humankind in this new century. It is about realizing a Knowledge Economy and a humane society.

Wu Jisong invites us to think. I want to compliment him.

Ruud Lubbers.



RPM Lubbers .

Prime-Minister of the
Netherlands 1982—1994,
International President of
World Wild Fund for Nature (WWF)
Worldwide Well-known Economist
May 2000

吕贝尔斯 R. Lubbers 先生的序

《1984~2000 我的知识经济及其管理研究——从巴黎到北京》一书的出版是非常有必要的。当前，“知识经济”这个词本身就已引起了广泛的关注。

作为一名研究全球化和可持续发展的教授，在 20 世纪未出版的这本书不由使我想起了另一本著名的书，即 20 世纪 70 年代末出版的阿尔文·托夫勒的《第三次浪潮》。该书的主题是一种新技术，即后来人们熟知的信息和通讯技术将像第一次浪潮和第二次浪潮时期一样，对人类社会的发展产生极其深远的影响。第一次浪潮时期，农业技术的发明和应用使人类能够安定下来，不用再像从前一样居无定所，不停地迁徙寻找食物；第二次浪潮即工业革命时期，机械的发明和蒸汽驱动以及其他新技术发明的应用促成了大规模生产和大量工厂的兴建，并引起了城乡分化。

现在 吴季松博士论证了“知识经济”一词强调了这种经济的现代性和以知识为主的特性。在选择了这一论题之后，吴先生明确地指出了现在知识不仅仅是“书本上的东西（里卡多语）也不局限于“自然资源和工业技术”而且是关键的生产要素。

作者指出，知识不仅对于现代经济来说自始至终都是至关重要的（如新兴的科技园区），而且对于由信息和通讯

技术启动 进入了实践阶段的网络社会或者说是知识社会也是如此。此时，知识已不仅仅与经济有关，更与社会的各个方面息息相关。从我个人的角度，我想说非政府组织就像电子邮件社会。

作者对发展中国家给予了特别的关注。毫无疑问他是对的。知识经济是发展中国家更快速发展，赶上发达国家甚至实现跳跃式发展的必由之路。尽管知识经济正在全球迅速传播，但仍有许多人和部分国家还被排除在知识经济之外。

谈到发展中国家，客观地说，这种赶超过程还是部分处于工业革命阶段，部分处于知识经济阶段。这两者之间的平衡对可持续发展是十分重要的。本书作者对可持续发展同样予以了很大的关注。

“可持续发展”一词是 G·H·布伦特兰夫人在著名的联合国报告《我们共同的未来》中创意的。它指出了怎样更好地利用现代技术使未来的一代不要受到伤害，同时探讨了代际均衡、污染、气候变迁和生物多样性等问题。

为了实现可持续发展，我们需要最好地实践、强制性的保护自然和环境的措施以及创造性的思维方式。

知识经济时代邀请我们体验一种新的生活方式，创造一个公平的、可持续发展的和可以共同分享的社会（公平和持续成为长期的思想与准备和每个人以及所有人的选择）。知识经济也与 1992 年里约热内卢联合国环境与发展会议的一贯思想相吻合。

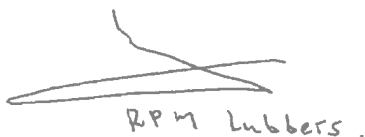
适值 2000 年，《地球篇章》已经出版。它是一本用道德

价值观在新世纪启发人类的书，以实现一个知识经济和人类的新社会。

本书的作者吴季松博士同样启发我们去思索。

我衷心地祝贺他！

R·吕贝尔斯

A handwritten signature in black ink, consisting of a long horizontal stroke with a curved line above it that loops back to the right, and the text "R.P.M. Lubbers" written below it.

世界野生动物保护基金组织主席

荷兰前首相 (1982~1994)

世界著名经济学家

2000年5月

Foreword of Professor C. Freeman

This book is a remarkably original contribution to the international literature on the Knowledge Economy. Professor Wu Jisong has an extremely deep understanding of trends in the world economy as well of course as a thorough knowledge of new developments in China. His responsibilities as Director-General of the Research Department of the Environment and Resources Committee of the National People's Congress, his experience as a leading scientist in the study of water resources, his work with several major international organisations and his world-wide travel have made him exceptionally well qualified to write this book.

He is not afraid to tackle some of the most difficult problems of contemporary society, such as the reconciliation of growth objectives with environmental concerns or the problems of future employment in the face of rapid technical change. Particularly interesting is his idea that establishing an enterprise can be regarded as a Ph. D. dissertation, but his book is full of many other equally interesting ideas and comments. In the best traditions of Chinese civilization, he relates his analysis to ethical principles which are of universal

concern. I commend his book most highly to all those studying the new trends in the global economy.

Chris Freeman



Emeritus Professor of Science
and Technology Policy, SPRU

University of Sussex

July 2000