

非洲农业开发投资指南丛书

FEIZHOU NONGYE KAIFA TOUZI ZHINAN CONGSHU

非洲

农业资源开发利用

FEIZHOU NONGYE ZIYUAN KAIFA LIYONG

文云朝 主编



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**The Forum on China—Africa Cooperation
Ministerial Conference, Beijing 2000'**

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非洲农业开发投资指南丛书

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序 言

经过长期艰苦卓绝的斗争，中国与非洲国家赢得了民族独立和解放事业的伟大胜利。这个胜利为中国和非洲各国在 21 世纪实现伟大复兴奠定了基本制度基础。在 20 世纪后半叶，中国在经历了一个曲折的发展历程后，终于找到了一条符合中国国情的发展经济的道路。特别是在实行改革开放的 20 余年时间里，使国民经济得到了快速发展，综合国力有了迅速提高。非洲各国取得民族独立后，在巩固新生政权、维持社会稳定、发展国民经济等方面都作出了非凡的成绩。在农业方面，有一些国家已经找到了适合自己国情的正确发展道路，有的国家已经基本解决了农业问题。但从总体上看，非洲农业形势依然十分严峻。农业基础地位还比较薄弱，抗御自然灾害的能力还比较低，农业生产技术还比较落后，以至粮食生产的增

长赶不上人口自然增长的需要。自 60 年代以来，非洲全洲的粮食净进口量不断增加，农业问题已经成为制约非洲发展的关键因素。因此，消除贫困与农业发展是非洲前进道路中必须解决的问题，应该给予充分重视，并首先加以解决。在过去的 40 多年里，中非农业合作已经取得了巨大成绩。从发展的眼光看，由于资源、市场、经济结构方面的互补性，中非农业是最具合作潜力的领域之一。合作对中国和非洲国家的发展都是有利的。

中国农业取得了举世瞩目的成就。在 20 世纪里，中国人民不仅继承了精耕细作的光荣传统，而且成功地实现了传统农业向现代农业的转型，彻底结束了 20 世纪初叶赤地千里、饿殍遍地的悲惨历史。中国人民不仅用世界 7% 的土地养活了世界 22% 的人口，而且不断改善农业生产结构和农产品供应品种，提高人民生活质量。在近 20 年，中国农业更是取得了长足的发展，为国民经济的健康发展做出了巨大贡献。目前，中国农业发展正面临着经济全球化、知识经济和加入世界贸易组织的挑战，但这同时也是中国农业进行新的结构调整和升级的难得机遇。中国农业一定能够顺应历史发展的总要求，继续发挥国民经济基础地位的作用，把一个丰富多样、优质安全的农产品市场和一个繁荣富足、祥和美丽的新形象展现在世人面前。

非洲土地肥沃，自然条件好，农业发展潜力巨大。非洲是多种热带作物的主产区，可可、咖啡、天然橡胶、棉花、油棕榈及天然香料等热作产品的产量和出口量在世界市场上占有较大比重，热作产品出口仍是一些非洲国家的主要外汇来源。非洲有大面积草场，渔业资源也很丰富，非洲沿海盛产沙丁鱼、金枪鱼、鲐等鱼类。据联合国粮农组织估计，只要创造一定的水利条件，非洲耕地面积至少

可以扩大 3 倍。非洲提高粮食单产的潜力很大，目前非洲谷物单产约为 1240 公斤/公顷，不到世界平均单产（2830 公斤/公顷）的一半。只要通过扩大灌溉，增施肥料，防治病虫害，改善生态环境等，完全有条件将非洲粮食作物单产水平提高到目前世界平均水平，非洲国家依靠现有耕地养活自己将绰绰有余。

中非农业合作有着光荣的历史。在过去的 40 多年里，中国不仅积极支持非洲各国人民要求民族独立的政治主张，而且也力所能及地提供了物质、技术、人才等多方面的无任何附加条件的援助，同时开展了多种形式的互利合作。我国先后帮助友好的非洲国家建设了约 200 个农业项目，包括农业技术试验站、农业技术推广站和一些规模较大的农场。我国援助的农业项目为促进受援国农业经济的发展，农业生产技术水平和农产品产量与质量的提高，改善当地农业产品供需状况发挥了重要作用。如在坦桑尼亚的大型机械化水稻农场，曾连年获得大丰收，年均总产占其全国大米产销量的 1/4，仅用 6 年时间就收回了建设投资。中非农业合作又是双向互利的。中国在向非洲国家提供农业经援的同时，也从非洲学到不少先进农业技术和经验，还积极引进、试种了一些有价值的农业种质资源。比如，在周总理的倡议下，我国向摩洛哥派出农业技术组，学习了先进的柑桔栽培技术；从赞比亚引进了剑麻品种，在南方适合种植的地区大力推广，取得了显著的经济效益；先后多次向埃及、多哥派出农业技术组，学习他们的棉花种植技术；从喀麦隆引进咖啡良种，逐步扩大种植面积；请津巴布韦专家帮助解决鸵鸟繁育问题等。

中非农业合作是南南合作的重要内容，是中非经贸合作的重要组成部分，中国将一如既往积极推动形式多样的

中非农业合作。第一，根据非洲需要和中方可能，继续向非洲国家提供必要的农业技术援助。第二，加强农业技术合作与交流，巩固农业经援成果，使之继续、更大地发挥作用，取得更好的经济效益和社会效益。第三，推动农业合作开发，积极支持和鼓励有实力的大型企业到非洲开展农业方面的合作与开发，把非洲丰富多样的农业资源优势尽快转化为产品优势、市场优势和经济优势。第四，积极参与多边合作，向非洲国家派遣农业技术专家，并提供必要的物力、财力支持。第五，加强农业合作研究和交流，接受非洲农业专家到中国进行合作研究，接受非洲农业方面的留学生，支持中国农业专家到非洲考察、开展研究。

非洲农业开发投资指南丛书的出版对中非农业合作将会起到积极的推动作用。为了满足进一步加大中非农业合作开发力度的需要，农业部于1998年与外交部、外经贸部联合发起，组织国内从事非洲研究的专家学者百余人，开展了“非洲农业资源和农产品市场开发利用研究”（该项目列入了农业部“九五”攻关重点研究计划）。非洲农业开发投资指南丛书是根据这项研究成果而编写的。“指南”编委会由农业部、外交部、外经贸部主管部领导，各有关司局及研究、教学、企事业单位的领导和学者组成。“指南”内容共四大部分，分五卷出版：1.《非洲农业发展简史》（第一卷）；2.《非洲农业资源开发利用》（第二卷）；3.《非洲农产品市场和贸易》（第三卷）；4.《非洲各国农业概况》（第四、五卷）。参与编著工作的百余名专家学者分别来自农业部、外交部、外经贸部、中联部、北京大学、中国农业大学、中国科学院、中国社会科学院、中国农业科学院、中国外经贸研究院、中国现代国际关系研究所、非洲农业开发中心、农业部规划设计研究院等单

位。近三年来，编著者致力于提高研究水平和撰稿质量，把长期从事非洲问题的理论与近年来非洲政治经济社会的动态结合起来，联系我国面向 21 世纪的国际环境和国内经济建设的实际，经过艰苦努力，终于撰写出了这套基本反映了我国非洲农业研究水平的新作。

我国政府将在今年 10 月份举办“中非合作论坛”，这是中非交流史上一次空前盛会。江泽民主席在今年访问南非时指出：中国作为一个发展中大国，同情和支持非洲实现稳定和振兴的强烈愿望，愿与非洲国家在南南合作的旗帜下，加强合作、增进共识、相互支持、扩大合作。中国愿与非洲国家共同探讨如何在经济上发挥互补优势，挖掘潜力，使中非经贸合作的质量和水平再上一个新台阶；面向 21 世纪，推动建立公正合理的国际政治经济新秩序，更好地维护发展中国家权益。

我认为，要贯彻落实好江泽民主席提出的关于 21 世纪中非关系的战略构想、实现两大战略目标，加强中非农业合作开发工作将是一项十分重要的具体措施；而作为一项基础性工作，非洲农业开发投资指南丛书的出版发行是具有重大理论价值和现实意义的。我相信，21 世纪的中非农业合作将是意义深远并具有光明前景的事业，而且一定能够取得辉煌的成就。是为序。

非洲农业开发投资指南丛书编委会主任
中华人民共和国农业部副部长



PREFACE

After some arduous struggle, China and African nations have won the great victory of national independence and liberation cause. Such victory has laid the foundation of basic system in the realization of great rejuvenation in the 21st Century for China and various African nations. After going through a winding process of development in the late 20th Century, China has finally found a way to develop her economies conforming to the national conditions of China. In particular, in the 20 years of the implementation of reform and opening to the outside, national economy has obtained fast-paced development, synthesized national strength quickly receiving improvement. After various African countries obtained independence, they have all achieved extraordinary performances in the consolidation of regenerated regimes, maintenance of social stabilization and development of national

economies . On the aspect of agriculture, some countries have found the correct path to development suitable to their own national conditions, some have basically solved agriculture problems. However, from the overall point of view, the African agricultural situation is still rather harsh, their agricultural fundamental status is still quite fragile, their capability against *force majeure* is fairly submissive, their agro-productive technique is still lagging behind, resulting in the retarded growth of food production against the need of natural growth of populations. Since the sixties, the quantity of food import into the whole of Africa has never ceased to decrease; agricultural problem has now become the key factor of preventing Africa from developing. Therefore, the eradication of poverty and agricultural development has become the problem that must be resolved; priority should be given for solution. In the past four decades, China and Africa have achieved great result in the agricultural cooperation. From the point of development, as resources, markets and economic structure are all complementarity, China-African agriculture is one of the areas with the best cooperative potential. Such cooperation is favorable to the development between China and African nations.

China's agriculture has commanded world attention. In the 20th Century, the Chinese people had not only inherited the glorious tradition of being meticulous and demanding, they have also successfully achieved the transformation of traditional agriculture to modernized agriculture, totaling ending the tragic history of having thousands of miles of cracked, parched and deserted land with bodies of starved people during the early years of the last century. Chinese people have not only utilized 7% of land in the world to feed 22% of world popula-

tions, they have also continued to improve agro-production structure and agro-product supplies to improve the people's living standard. In the last 20 years, China has obtained substantial agricultural development, offering her great contribution towards the robust development of national economy. At the moment, agricultural development is facing the challenge from globalization of economies, knowledge economy and the accession to WTO. But this is also the time for a rare opportunity for China's agriculture to carry out new structural adjustment and upgrading. Agriculture in China will be able to cope with the general requirement of historic development, and to continue to play the function of putting the fundamental status of national economy into play, and to display a new image with abundant and diversified agro-product market that is superbly secured, flourishing and beautiful, in front of the world.

Soil in Africa is fertile, with excellent natural predicament and grent potential for agricultural development. Africa is the main production area of a lot of tropical crops such as cocoa, coffee, natural rubber, cotton, oil palm and natural spices with rather large proportion in the world market in production and export. export of tropical agro - products is still the major source for foreign exchange in certain African countries. There is a large area of meadow in Africa, with abundant fishery resources as well. The African coasts are abundant with sardine, tunas and mackerels. According to FAO, it is estimated that as long as there is sufficient water conservancy condition, the African plow area may be enlarged at least three times. There is great potential in improving African food per unit yield. Currently per unit yield of African crops is approximately 1240kg/hectares, less than half of the world average per unit yield (2830kg/hectares). As long as ir-

rigation is extended, fertilizer is increased, precaution measures are taken to treat insect pests and to improve bio-environment, the possibility of improving African food per unit yield to the current average world standard; and it is more than enough for the African nations to feed their own people with the existing plow land..

Agricultural cooperation between China and Africa had a glorious past. In the past four decades, China had not only positively supported the political belief of the African people for national independence, she has also done her best to provide unconditional aids in materials, technologies, and talents, apart from the launching of mutual cooperation in various forms. China has successively helped friendly African nations in the construction of about 200 agricultural projects, including agriculture technological testing centers, agriculture technological promotion centers and certain larger scale agricultural farms. Agricultural aid projects provided by China are to promote the development of agricultural economies of the aided countries. The improvement of agriculture technological standard and the production of agro-products play an important role in the supply-and-demand situation of local agro-products. For instance, the large scale Tanzanian mechanized paddy farms have seen bumper harvests year after year, with average annual output amounting to more than one quarter of the production and sales amount of rice in the whole country. Investment on the construction was fully recovered within six years. The China-African agricultural cooperation is bi-lateral and mutual beneficial. At the same time of providing agricultural aid for Africa, China also gained a lot of advanced experiences in agricultural technologies, while at the same time positively importing and testing certain valuable agricultural plantation

resources. For instance, under the proposition of Premier Zhou En-lai, China dispatched an agriculture technological team to Morocco to study advanced orange cultivation technique and importing *sisal hemp* from Zambia. When these were successfully done, the techniques were widely promoted in areas suitable for plantation in the southern part, achieving obvious economic benefits. We had also successively dispatched agro-technical teams on many occasions to Egypt and Togo to study their technologies in cotton plantation, and to import excellent coffee species to gradually expand out plantation areas, and to invite experts from Zimbabwe to help solve problems in the reproduction of ostriches.

China will adhere to the tradition to positively promote agricultural cooperation with Africa in different forms. Such agro-cooperation is the major content between the South-South cooperation, and a major component part of China-Africa economic trade cooperation. China will continue to positively promote diversified agricultural cooperation with Africa. First of all, based on the African need and Chinese capability, to continue to provide necessary agricultural technical aid for the African nations. Secondly, to reinforce agro-technical cooperation and exchange, to consolidate agro-economic aid result so as to continue and play a better role in the achievement of economic benefits and social effects. Thirdly, to promote agricultural cooperation and development, to positively support and encourage substantial large scale enterprises to go to Africa to launch cooperation and development in agricultural aspects, and to transform the advantages of the abundant and diversified agro-resources of Africa into product advantages, market superiority and economic edges. Fourthly, to positively participate in

multi-lateral cooperation, dispatching agro-technical experts to African nations and to provide necessary material and financial supports. Fifthly, to reinforce research and exchange in agricultural cooperation, accepting African agricultural experts to come to China to carry out cooperation and research, to accept African agricultural students, to support Chinese agricultural experts to visit Africa to carry out investigation and study, and to start off research.

The publication of "THE SERIES OF INVESTMENT GUIDE FOR THE DEVELOPMENT OF AFRICAN AGRICULTURE" will play a positive role of promoting the cooperation in agricultural between China and Africa. In order to meet the demand of further enlarging the development force in agricultural cooperation between China and Africa, the Ministry of Agriculture and jointly launched a campaign with the Ministry of Foreign Affairs and the Ministry of Foreign Trade AND ECONOMIC COOPERATION to pool together more than 100 scholars conducting African studies, setting off the "STUDIES ON THE DEVELOPMENT AND UTILIZATION OF AFRICAN AGRICULTURAL RESOURCES AND AGROPRODUCT" (this research project has been included to be the key project in the Ninth Five-Year Plan for the Ministry of Agriculture). "THE SERIES OF INVESTMENT GUIDE FOR THE DEVELOPMENT OF AFRICAN AGRICULTURE" is being compiled according to the result of this research. Editorial committee of the "Guide" comprises of leadership from the Ministries of Agriculture, Foreign Affairs, Foreign Trade & Economic Cooperation, scholars from various offices and departments in research, academy and work units. Contents of the "Guide" include five volumes and four major parts; 1. "Brief History of Develop-