

犀牛活体刮角技术及犀角生物制药产业化项目

Shaving alive rhino horn technology and rhino horn biological medicine industrialization project

一、项目法人基本情况 Basic information about the project and legal representative

(一) 企业基本情况 Company introduction

公司性质：有限责任公司；创建时间：2005年8月16日

Company type: Co., Ltd; Established: August 16th, 2005

工商注册号：2302061100378；注册资本：10,000万元；法人代表：易涛

Registered No.: 2302061100378 Registered Capital: 100 million

Legal representative: Yi Tao

主要产品：含犀角的系列产品、八个剂型的中成药品或保健品。

Main Products: products with rhino horns, Chinese proprietary medicines or health products.

生产规模：一期六条生产线，年生产能力5,000万盒（瓶）。

Production scale: First-stage project has six production lines with annual production ability of 50 million boxes (bottles)

技术水平和时常占有率：此项目主要从事以犀角为主要原料的中药及其它药品的开发、生产和经销。同时，为了保证龙晖药业有限公司的“犀角”原料供应，在海南省三亚市兴建一个占地2000多亩的犀牛养殖和观赏基地，进行犀牛的繁育和科研，并利用“犀牛活体刮角技术及犀角药用研究”的科研成果提取犀角，作为龙晖药业有限公司的犀角供应基地。目前，该项目的“犀牛活体刮角技术”的论证验收会已经在海南三亚结束，顺利完成论证会，正在上报国家相关部门。重新组建的龙晖药业有限公司已经于2007年12月取得国家GMP认证。公司具备了药品生产的能力，可以从事中草药前处理、中草药提取、固体制剂、液体制剂等多个剂型药品的开发、生产和经销。

Technology:

This project mainly specializes in the development, production and distribution of traditional Chinese medicine and other kinds of medicine which are used rhino horn as main raw material. At the same time, in order to make sure the supply of rhino horns, Longhui Pharmaceutical Co., Ltd established a rhino propagation and appreciation base which covers an area of more than 2000 Mu in Sanya city, Hainan province and is used for rhino propagation and scientific research. Extracting rhino horn with the scientific achievements of “shaving alive rhino horn technology and rhino horn pharmacological

study", the base is established as the rhino horn supply base of Longhui Pharmaceutical Co., Ltd. The re-established Longhui Pharmaceutical Co., Ltd has got GMP certificate in December 2007. With medicine production ability, the company can specialize in the development, production and distribution of Chinese herbal medicine pre-treatment, Chinese herbal medicine extraction, tablet and capsule, liquid preparation, etc

“犀牛活体刮角技术及犀角药用研究”应用项目，是一个产学研相结合的项目，其形成了一个从原料提取、加工和深度开发、利用的完整的经营链条，可以进行以犀角为主要原料的中药的深度开发和利用，并可以从事其它药品的开发和生产，此项目具有良好的发展空间。

“Shaving alive rhino horn technology and rhino horn pharmacological study” applied project is a project with industry, university and scientific research institution together. It formed a complete business chain of raw material extraction, processing, deep development and utilizing. We can develop Chinese herbal medicine which is used rhino horns as the main raw material. We can also specialize in the development and production of other kinds of medicine. This project has good growth prospects.

（二）企业发展战略及发展目标 Company development strategy and aim

1、财务指标: 项目达产后, 年销售收入: 39,099万元。项目达产后, 年利润总额: 17,886万元。

Financial target (full capacity): annual sales revenue: 390.99 million RMB; total annual profit: 178.86 million RMB

2、投资评价指标 Investment Evaluation Indicator

(1) 全部投资: 内部收益率: 50.06%; 投资回收期: 5年(含建设期2年)。

Total investment: internal rate of return: 50.06%; investment pay-off period: 5 years (including 2 year's construction period)

(2) 自有资金: 内部收益率: 72.94%; 财务净现值: 34,614万元 ($i_c=12\%$) ; 投资回收期: 4.60年。

Own capital: internal rate of return: 72.94%; financial net present value: 346.14 million RMB ($i_c=12\%$) ; investment pay-off period: 4.6 year.

公司的设计生产能力为八个剂型的中成药品或保健品（一期五个剂型，六条生产线）年产5,000万盒（瓶）。设计上完全按照GMP（药品生产质量管理规范）标准要求和国家相关环保标准进行。

The company's design capacity is Chinese proprietary medicines or health products. (First-stage project has six production lines with annual production ability of 50 million

boxes (bottles). The company will follow GMP standard and the related national environmental standards.

3、销售收入预测Sales forecast:

项目达产后，主要产品的年生产能力为:安宫牛黄丸50万丸,犀角化毒丸50万丸,犀角地黄丸50万丸,食品酒3万瓶,保健酒1万瓶。达产后，年销售收入预计为39,099万元。

When the project reaches the design production capacity, the production capacity of the main products is as following:

Cow-bezoar bolus for resurrection: 500 000 pills

Rhino horn detoxication pill: 500 000 pills

Rhino horn Dihuang pill: 500 000 pills

Foodstuff wine: 30000 bottles

Health wine: 10000 bottles

Full capacity: annual sales revenue: 390.99 million

二、项目的基本情况project basic information

(一) 建设的目的意义：Construction meaning

龙晖药业有限公司的“犀牛活体刮角技术及犀角药用研究”应用项目是对珍稀动物药用开发利用的国家级重点项目。犀角是传统中医药界最重要的中药材之一，取自世界稀有动物犀牛，非常珍稀。其主要成份有：犀氨酸、角朊、磷酸钙、多种氨基酸、肽类、蛋白质等，具有败毒抗癌、清热凉血、消疹定惊的功用。原来，犀角主要是采取狩猎或用陷阱捕杀犀牛后，割下犀角的方法所得，后因犀牛受到世界组织的保护，不得随意捕杀，而成为奇缺的中药材品种。

“Shaving alive rhino horn technology and rhino horn pharmacological study” applied project of Longhui Pharmaceutical Co., Ltd is rare animal medical development and utility national key project. Rhino horn is one of the most important Chinese herbal medicine in traditional Chinese medicine field. We get rhino horn from rhino, which is a kind of rare animal. Its main composition include: S-sulfocysteine, keratin, calcium phosphate, many kinds of amino acid, peptide, protein, etc. It has the following effect: detoxication and anti-cancer, eliminating pathogenic heat from the blood, removing eczema.

龙晖集团的“犀牛活体刮角技术”研究，已经得到国家林业局的立项批准，并得到了国内知名的野生动物管理学科的科学院院士、东北林业大学教授马建章的支持，他是此项目的带头人。目前，有关的研究成果已经申报了国家专利。

Longhui Group's “Shaving alive rhino horn technology” was approved by National Forestry Bureau and Ma Jianzhang, professor in Northeast Forestry University and domestic

famous academician of Wild Animal Management. He is the pacemaker of this project. At present, some related research achievements have already been applied for national patents.

“犀牛活体刮角技术及犀角药用研究”应用项目，主要是利用“犀牛活体刮角技术”的研究成果，推动以“犀角”为代表的珍稀野生动物药用资源的深度开发和利用，而实施的一项“从犀牛规模化养殖、犀角提取、犀角药用研究和应用（制药）全流程”的珍稀野生动物资源的开发和利用项目。此项目一经提出，就受到了国家林业局有关领导的高度重视，被认为是继承和发展国家传统中医药文化的好项目，此项目的开发必将对祖国中医药事业的发展起到重大的促进作用。

“Shaving alive rhino horn technology and rhino horn pharmacological study” applied project is mainly using the research achievements of “shaving alive rhino horn technology” to promote the deep development and utilization of rare animal medical resource with rhino horn as the representative. It is a project with rare wild animal resource development and utilization of “rhino large scale farming, rhino horn getting and rhino horn pharmaceutical study and application (medicine production) full process”. When the project was brought forward, it was paid much attention to by the related leaders in the State Forestry Administration. It is considered to be a good project which can inherit and develop traditional Chinese herbal medicine. The development of this project will surely promote traditional Chinese medical cause.

（二）市场分析：Market analysis

（1）犀角由于具有败毒抗癌、清热凉血、消疹定惊的功用而奠定了其在传统中药界的重要地位。由于犀牛受到世界组织的保护，不得随意捕杀和进行有关犀角的贸易活动，导致了犀角资源奇缺，虽然国家也鼓励进行替代品药用的开发和研究，但尚未取得实质性的进展。因此，犀角的市场需求量会很大。

Rhino horn is very important in traditional Chinese medicine field due to its following effects: detoxication and anti-cancer, eliminating pathogenic heat from the blood, removing eczema. Rhino horn resource is rare because rhino are protected by World Organization and nobody shall catch and kill them or do trade activities on rhino horns. Chinese government encourages people to develop new substitute for it, but no substantial progress has been made. Therefore, rhino horn market demand will be great.

（2）与替代品和同类功用的西药相比，犀角具有天然、特效、无副作用的特点，因此，含犀角的中药产品也更容易被市场和消费者所接受，且市场销售价格会很高。

Compared with the substitutes and western medicine which has the same effect, rhino horn has the following characteristic: natural, special good effect and no side effect.

Therefore, traditional Chinese herbal medicine with rhino horn inside will be easily accepted by the market and the consumers and the price will be higher.

(3) 由于犀角主要由公司内部供应, 不受市场制约, 也无竞争对手, 所以公司在犀角原料供应上的优势将会非常明显, 销售价格和生产成本也将会相对稳定。另外, 犀角活体获取、药用研究和生产销售活动整体封闭在龙晖集团企业内运做, 有利于国家对犀牛的保护与有效利用工作。

The rhino horn will be supplied by the company itself, so there will be no market restraints or competitors, the company's raw material advantages of rhino horn are obvious. The price of the medicine and its cost will be stable. In addition, getting alive rhino horn, pharmacological study, production and sales will be completed closely inside Longhui Group, which will be benefit for rhino protection and effective utilization.

(4) 根据国家的相关规定, 准字药品批复后, 享受国家药监局新药保护政策8-10年, 功能性保健品可申请发明专利, 保护期10年, 在保护期间, 全国范围内只允许独家生产, 可充分利用保护政策大力开发全国市场。

According to the national related provision, after the medicine getting approving, the medicine will enjoy new medicine protection policy for 8-10 years from the State Food and Drug Administration. The company can apply for patents for the functional health products and the protection period is 10 years. Within the protection period, only this company will be allowed to produce this kind of medicine in China, so the company can fully develop its market in China with the protection policy.

该项目所生产的产品在同类药品市场上将具有良好的市场前景和强大的市场竞争力, 该项目的成功将会很好地发挥中医药产业对人类防病、治病和医疗保健事业的重要作用, 并为发展我国的中医药产业与保护野生动物药用资源的协调统一探索出一条全新的发展道路。

The products in this project will have a good market prospect and strong market competition in the medicine field which has the same effect. The success of this project will help traditional Chinese medicine play a great role in preventing disease, curing disease and health care cause.

(三) 建设内容、建设规模及产品方案 Construction content and scale and products

该项目的基本: 生产厂房8000平方米、办公楼及公用工程的建设5290平方米, 公司的设计生产能力为八个剂型的中成药品或保健品(一期五个剂型, 六条生产线)年产5,000万盒(瓶)。

Production workshop: 8000 square meters

Office building and public service: 5290 square meters

The company's design capacity is Chinese proprietary medicines or health products. (First-stage project has six production lines with annual production ability of 50 million boxes (bottles).

(四) 建设性质, 是否新征土地, 建设地点Project type, whether collect new land and project site

建设性质属于新建; 新征土地51600平方米; 建设地点: 齐齐哈尔市富拉尔基区工农街

Project type: newly built

Collect new land: 51600 square meters

Project site: Gongnong Street, Fularji District, Qiqihar City

(五) 项目总投资及构成、资金筹措方式Total investment and its structure, fund raising mode

投资总额: 10,000万元人民币。其中: 固定资产投资: 4,750万元; 铺底流动资金: 2000万元。自筹资金: 3250万元。

Total investment: 100 million RMB

Fixed asset investment: 47.5 million RMB

Current funds: 20 million RMB

Self-raised funds: 32.5 million RMB

(六) 经济、社会效益: Economic benefit and social benefit

项目达产后, 年销售收入: 39,099万元, 年利润总额: 1.91万元。

Full capacity: annual sales revenue: 390.99 million; total annual profit: 19100 RMB

龙晖药业有限公司是异地新建的企业, 是龙晖集团有限公司的子公司。原齐齐哈尔第三制药厂, 因不适应市场竞争环境和无力按照国家GMP认证的有关要求进行改造而停产多年, 龙晖集团接收后, 注入资金对原齐齐哈尔第三制药厂职工进行了妥善安置, 解除了政府的后顾之忧。全面达产后将新增安置就业200人。

Longhui Pharmaceutical Co., Ltd is an out-of-town newly-established enterprise. It is the subsidiary of Longhui Group. The original Qiqihar Third Pharmaceutical Co., Ltd stopped production for many years due to its failure to adapt to the competitive market and it couldn't make changes according to the requirements of national GMP certificate. After accepting the company, Longhui Group put some money into the company and made some new arrangements for the workers who used to work in Qiqihar Third Pharmaceutical Co., Ltd and this removed the government's trouble. The company will employ 200 more workers after the project reaches the design production capacity.

(七) 建成后的目标Aim

公司拟建成中国最具特色的中药制药企业。项目建成后，企业的技术水平将国内先进水平，产品将达到国内外的先进水平，企业在同行业处在最具特色制药企业。

The company is planned to be built into the most characteristic traditional Chinese medicine pharmaceutical enterprise. After the project being finished, the technology of the company will reach domestic advanced level and the products will come up to domestic advanced level. The company will become the most characteristic pharmaceutical enterprise in the industry.

（八）项目建设年限：Project construction limit

项目建设从2006年6月至2009年12月

June, 2006 ---- December 2009