

Hunan Sanhong Pharmaceutical Company Limited  
“True Tiger Wine” Project

Feasibility Studies Report

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## Chapter 1 General Introduction

### 1.1 Project Summary

#### 1.1.1 Project Title

“True Tiger Wine” Project Feasibility Studies Report, Hunan Sanhong Pharmaceutical Company Limited

#### 1.1.2 Project Construction Contractor and Corporation

Project Contractor: Hunan Sanhong Pharmaceutical Company Limited

Corporate Representative: Zhu Yicheng

#### 1.1.3 General Competent Authority of Project

Forestry Department, Hunan Province

#### 1.1.4 Nature of Project

New Project

#### 1.1.5 Specific Competent Authority of Project

Wildlife Protection Bureau, Forestry Department, Hunan Province

#### 1.1.6 Project Construction Location and Area

Location: The project is sited in Tiaoma Township, Changsha County, Changsha City, Hunan Province.

Project Construction Land Area: 100 Acres.

### 1.2 Introduction of Project

The Sanhong Company adopts the most advanced flora-and-fauna extraction method to formulate the “True Tiger Wine” with 10 odd rare flora and fauna ingredients, including tiger bones, caterpillar fungus (*cordyceps sinensis*), Chinese

wolfberry, tortoise plastron, antler and others. The products manufactured under the existing 200 ton capacity production line have been inspected and certified by the provincial Department of Health and Administration of Quality and Technology Supervision, thus conditioned for mass production and sales. The project is to industrialise the “True Tiger Wine”, with a total investment of 80 million RMB as well as a loan amounting to 50 million RMB. The construction phase of the project is scheduled for a year and in the third year there will be annual “True Tiger Wine” sales of 800 tons, taking up approximately 10% of the market share. Once the project is in production, the annual production value will go beyond 1 billion RMB, forecasting a short payback period (approx. 15 months), high financial internal rate of return (116%) and 354% of profit and tax investment ratio.

### **1.3 Project Construction Scale**

The project aims to secure a land of 100 acreage to build the factory and ancillary facilities that will ascertain 4 production lines, each entailing a 200 ton production capacity of tiger bone wine; 3 brand new production lines of tiger bone wine will be installed to fulfil the annual production of 800 tons of tiger bone wine and reach the objective output value beyond 1 billion RMB.

### **1.4 Project Construction Background and Purposes**

The business operations of rare wildlife animals have been stopped in this country for nearly 20 years, during which the large scale zoos, circuses, specimen makers, tiger breeders and law enforcement authorities have accumulated a certain amount of tiger bones arising from tigers’ natural deaths, oestrous-aggression casualties, birth casualties and confiscation from illegal poaching. Once stored overlong, the tiger bones become dilapidated with the loss of value to traditional medicine and must be disposed, otherwise causing the waste of funds.

”Tiger bone wine” is primarily used in Chinese medicine to treat traumatic injuries with a longstanding history. Although production has been ceased for nearly 20 years, market high-regard remains. According to professional survey, a good number of middle-aged and elderly consumers savour the craving and anticipate highly “tiger bone wine”, thus creating an enormous potential for the market development of a “tiger bone wine” brand.



The Chinese government, by referring to the open protection measures of African elephants, has set forth a humanistic approach for the development-based protection policy, where the wildlife supply is replaced by captive breeding. Under the government's guidance and strict permit management, this project is therefore specifically established for the valuable utilisation of tiger bone resources, satisfaction of the public's demand for tiger bone wine and funding additions to the government's animal protection endeavours.

## Chapter 2 Project Technical Review

The “True Tiger Wine” is developed and manufactured by the Hunan Sanhong Pharmaceutical Company Limited, which is a subsidiary company of Changsha Sanzhen Animal Artistic Specimens Company Limited. The Sanzhen Company is a specialist company certified (Hunan-Forestry-Protection Registry No. 32 (2002)) by the Forestry Department, Hunan Province and registered at Changsha Administration for Industry and Commerce (CSAIC) in December 2001. Through more than 10 years of development and settlement, it has accumulated rare and precious wildlife animal resources. The Sanhong Company was therefore created to develop these treasured resources in depth for the generation of societal wealth and the benefit of public well being.

### 2.1 Traditional Manufacturing of Tiger Bone Wine

In terms of tiger bone wine manufacturing, there are two key technologies, one being the processing of tiger bones and the other being the fusion of processed tiger bones and alcohol. The processing methods of tiger bones were initially recorded in the “Precious Prescriptions for Emergencies” in the Tang Dynasty, including browning (to yellow colour) and scorching by liquid-assisted stir-frying, crushing after aforesaid browning and then alcohol maceration for consumption. The number of processing methods in the Song Dynasty was developed at its peak to over ten methods. By the Ming Dynasty, the methods of the aforesaid browning in vinegar decoction, wine-rinsed vinegar-assisted stir-frying and also ashing came into place. In the Qing Dynasty, the existing processing methods were basically continued as is. In the well developed ancient processing methods, there are mainly:

- 1 Stir-frying (incl. liquid-assisted) and calcinations (sealed pot and red-pigmented) without any ancillary material
- 1 Processing with ancillary materials: including alcohol, vinegar, oil, honey and ginger additions

Tiger bone medicinal wine is a clear liquid product containing the active ingredients extracted from tiger bones through the necessary processing of suitable formula of Chinese medicine materials in conjunction with the solvent of white or yellow spirit in adequate alcohol percentages; occasionally, the Chinese medicine of choice is added in the process of making.

## **2.2 Origins of Know-how**

### **2.2.1 Formula of Medicinal Wine**

Tiger bone wine is a traditional medicinal wine referenced in many medicinal wine formulas. However, there are many divergences between the modern and traditional ways of living as well as necessities, hence adaptation to the new environment is essential for people. The Sanhong Company develops formulaic research by using primarily traditional Chinese medicine that serves both purposes of medicine and food and features health care functions to achieve the aims of physical fitness, fatigue recovery and anti-rheumatic auxiliary.

In partnership with the authoritative institutions of the College of Life Science (Hunan Normal University), the Institute of Wildlife Conservation (College of Forestry, Central South University of Forestry and Technology), Hunan Agricultural University, Pharmacology Laboratory of Chinese Medicine and Pharmaceutics Laboratory of Chinese Medicine, the company has, as a result of research and development, produced the scientific formula where more than 10 types of rare flora and fauna are used as the main active ingredients, including tiger bones, cordyceps sinensis, tortoise plastron and antler, and sorghum liquor is used as the alcoholic base. Such formula presents good taste, contains high proportions of active ingredients and has been tested and certified successfully by national authoritative institution.

### **2.2.2 Tiger Bone Processing Method**

The development of the Chinese medicine industry in this country is very rapid. The extraction technology of active ingredients from animals and plants is so mature and stable that the industrialised production with the application of tiger bone processing is completely sound.

The technology is much more innovative, compared to the traditional technical methods of liquid-assisted stir-frying and calcinations. Demonstrated by the company's actual production from the existing production line, the technology is advanced, efficient and particularly suitable for active ingredient extractions of certain Chinese medicinal materials, such as tiger bones.

## **2.3 Technology Foundation**

《Chinese Pharmacopoeia》

《Healthcare Food Testing and Assessment Standards》

《Procedures Governing Toxicological Assessment on Food Safety》

《Administrative Measures on Registration of Health Foods》

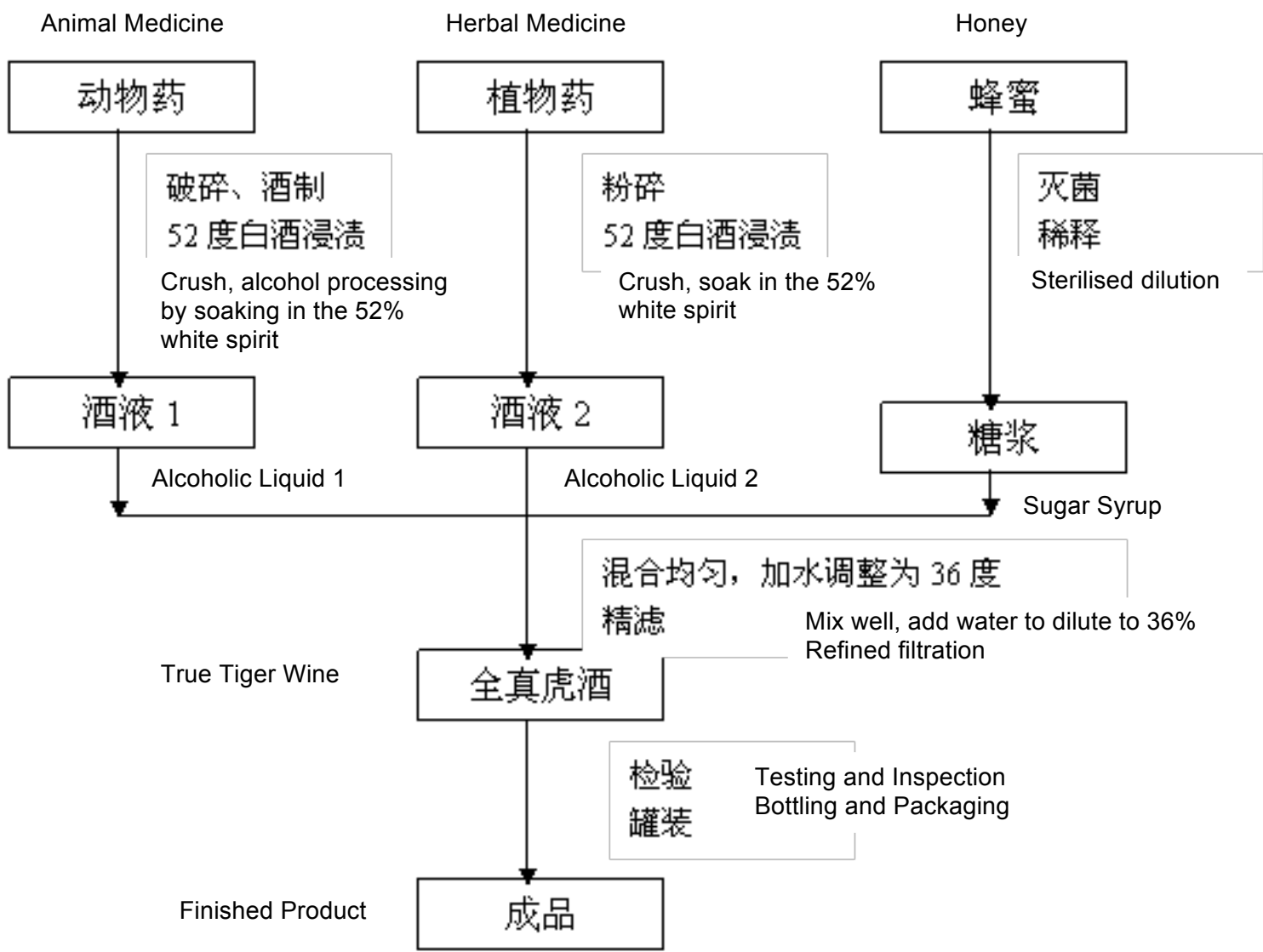
《The Food Product of True Tiger Wine》 Enterprise Standard No. Q/ACZK001-2004

## **2.4 Technological Procedures**

Crush animal medicine, e.g. tiger bones, into powders and add the 52% sorghum white liquor to soak; crush herbal medicine into powders and add the 52% sorghum white liquor to soak; respectively filter the soaking after a certain period of time and mix the filtered liquids, which are then diluted by sugar syrup until the alcoholic percentage drops to 33-36%; subsequently, add white spirit to the specified volume, mix well, filter, bottle up, test, package and store in the warehouse.

Key manufacturing technologies are: extractions from animals and plants, mixture and bottling and packaging.

The processing technology procedure is as follows:



## Graph 1 Primary Technology Flowchart

### 2.5 Intellectual Property Rights

#### 2.5.1 Enterprise Standard

In line with the alcohol production industrial requirement, the company has referred to the relevant regulations and standards, stipulated the Enterprise Standard of “True Tiger Wine” and been effected after submission under the Standard No. Q/ACZK001-2004.

#### 2.5.2 Trademark Registration and Manufacturing Permit

The trademark registration of “True Tiger Wine” has been submitted and officially processed. The company has been awarded the manufacturing permit, under Hunan-Hygiene-Food Manufacturing Licence No. 001 (2005).

#### 2.5.3 Quality Guarantee and Formula Protection

The tiger bone wine formula belongs to the core of the company’s intellectual property rights, thus the company has employed all effective means of protection for it.

The manufacturing workshop is in compliance with the alcohol manufacturing and food hygiene requirements. The quality guarantee system in line with the industrial standards has been established in the manufacturing process. Upon completion of the newly built plant, the company will develop a series of quality certifications to facilitate the standards and advancement of manufacturing management.

### 2.6 Main Equipment Inventory of the Production Line (200T)

Table 1 Main Equipment Inventory of the 200T Production Line

No.	Subject	Specification	Volume	Remark
01	Stainless Steel Wine Storage Vessel	20 Tons	1	
02	Soaking Container	4 Tons	10	
03	Stainless Steel Mixer	4 Tons	4	

04	Automated Bottling Equipment	30 Tons	1 Set	
05	Automated Water Purification Equipment	30 Tons	1 Set	
06	Filtering Pump with Automated Loop		5 Set	
07	Whole Steel Working Station System			
08	Stainless Steel Pipeline System			
09	Miscellaneous			

### **2.7 Technological Parametre of the Production Line (200T)**

1. Production Capacity: 10 months production per annum, 8 hours per day and 200 tons per annum;
2. Power Consumption: 20KVA, mainly used for crushing and bottling machinery
3. Water Consumption: 20 Tons/Day
4. Permanent Staff: Production and technical personnel consisting of 15 people

### **2.8 Technological Assessment Conclusion**

As indicated by the testing results from the authoritative institutions and the public's pilot-trial consumption, True Tiger Wine can satisfy the public's modern needs and is both scientific and effective; the production of True Tiger Wine applies the mature biological extraction, filtration, bottling technologies that are technologically mature and stable for mass industrial production; through the stipulation of enterprise standards and industrial certifications, the processing procedures are formulated and the quality assurance system is thoroughly sound; through the effective measures of trademark registration and other intellectual property rights protection, the company holds the key to nourish and maintain the competitiveness and is safeguarded with its technology to ensure sustainable development.

The production line equipment holds the potential to adapt to the needs of expansion on an industrial scale.

## Chapter 3 Market Analysis and Forecast

### 3.1 About Healthcare Wine Market

#### 3.1.1 Synopsis

Healthcare wine denotes the specific type of wine that is made to enhance human health. That is to say that they are catered to specific **consumers intending to improve their metabolism, thus serving a remedial purpose**. On a global scale, the rising of modern development and use of healthcare wine has only taken place in recent decades. Along with the technological leap and rapid development of the modern wine industry, healthcare wine appears to be in a trend of **mass production and modern processing**.

In accordance with the released “Outline for the Development of Food and Nutrition in China”, healthcare wine is subject to the nature of safety and nutrition as well as the health enhancing functions of disease prevention and medicinal aid. Therefore, all sources used for the development of healthcare wine shall reflect the homology of medicine and food as regulated by the Ministry of Health. The need to upgrade the technology and reinforce the standards of quality, safety and health will help set forth a unique Chinese-featured development path.

**Healthcare wine is made of the wine base comprised of distilled white spirit, rice (yellow) wine, sake and grape wine soaked with some or many types of herbs. Its aroma is fused by the fragrances of alcohol and herbs. A refined taste shall be soft and tender to the mouth, gentle to the throat, unstimulating to the head and subtle to the taste of herbs, with a seamless merge of alcoholic and herbal fragrances.**

All types of healthcare wine have either **single or multiple health enhancement**. Different types of healthcare wine may **provide different functions**. Generally speaking, these would include the following major functions: **immunity improvement, muscular relaxation and better blood circulation, antirheumatic, osteoporosis reversal, virile aphrodisiac, anti-fatigue, anti-aging, blood lipids regulation, gastrointestinal digestion improvement and better quality of sleep**. In terms of tiger bone wine, the first 5 functions mentioned are the most pronounced.



Healthcare wine is not a disease-treating medicine entailing 70% of effect and 30% of toxicity but rather a kind of alcohol used for single or multiple functions to human bodies. Among the functions of healthcare wine, some safeguard normal metabolism, some slow down the functional degradation of organs and some regulate the abnormal biological indicators. In general, health enhancing wine is multi-beneficial. Alongside its functional development and increase, its benefits are growing as well.

One of the major features of healthcare wine is its suitability to certain consumers, mainly the prime-aged and pensioners. The health improving functions of healthcare wine in China are being developed holistically to meet the needs of all consumers, who can relate to it based on their biological, daily and professional needs.

### 3.1.2 Historical Development of Healthcare Wine Market in China

There have been 4 stages in the domestic development of healthcare wine:

Stage 1 : The period of traditional legacy where it was applied in Chinese medicine for chiropractic treatment. “Tiger bone wine” had a higher repute with a long history in this regard. However, ever since tigers became the national treasure, tiger poaching was banned and “tiger bone wine” petered out from the market.

Stage 2 : The period of **medical marketisation** operation. “Hongmao Medicinal Liquor” is one of the typical products that was introduced into the market on a list of approved drugs in the early nineties. It was targeted at the treatment market by way of large scale advertising that enhanced the consumers’ awareness of the benefits of healthcare wine. However, due to the exaggerated publicity of its efficacy, the market was slashed so as to gradually enter the third stage.

Stage 3 : The period of **nutrition supplements marketisation** operation. “Chinese Jing Wine” and “Yedao Lugui (deer/turtle) Health Care Wine” were the typical products. These products focused on branding and became the main force in the healthcare wine market through rapid expansion. With the raising healthcare awareness of the Chinese consumers and the decline in demand for the top ranked white spirit, the consumers’ demand for healthcare wine has shown an annual growth of approximately 30% since 2001. Therefore, the back-to-back market convergence from the prevailing capital investment of wine and cross-sectoral capitals has led to the fourth stage of the healthcare wine market.

Stage 4 : The era of market competition. **The leading company, Wuliangye Group**, invested handsomely to develop Dragon and Tiger wine; the national liquor, Moutai, was promoted extensively through the more competitive series of Moutai Bulao (anti-aging) Liquor; whereas, it was likely that the Changyu (dry red wine) Pioneer Wine Company had long developed the **Changyu Triple Testis spirit (sanpien liquor) series** due to its foresight. Hence, in spite of the past-focused overseas market in Southeast Asia, upon the discovery of the aforementioned 30% domestic growth in the healthcare wine market, they instigated strategic development in the domestic market. The centenary healthcare wine brand, Zhizhonghe, changed its conservative image and moved forward with a large-scale and brand-new integrated strategy in the Yangtze River Delta Economic Zone. In recent years, the most successfully promoted wines in the healthcare wine market include the “Hubei Jing Wine” and “Hainan Yedao Lugu Health Care Wine”. The high sales of the Jing Wine and Yedao Lugu Health Care Wine may just be the stimulant that awakened the dormant healthcare wine market to initiate economies of scale. Nevertheless, with regard to the negative historical image of the exaggerated medicinal functions of healthcare wine, the Chinese ex officio administration had to implement classification measures of healthcare wine.

### **3.1.3 Management Mechanism Adjustment**

The approval nomenclature has been updated from the Medicine-Health system to that of Hygiene-Food-Health. Prior to 2001, there were over 5000 domestic brands of healthcare wine. To regulate the healthcare wine market and control the exaggerated “medicinal functions”, the ex officio administration undertook the review and approval of the 5000 odd types of healthcare wine registered under the Medicine-Health system, including the new applications. Among which, 500 odd brands were approved to register under the Hygiene-Food-Health license. From then on, all review and approval of healthcare wine has been subject to the Hygiene-Food-Health license system. This means more than 4500 brands are not permitted in the market.

## **3.2 Market Capacity**

### **3.2.1 Total Capacity**

Approximately 2 billion in 2001 ;

Approximately 2.6 billion in 2002 ;

Approximately 3 billion in 2003 ;

Approximately 4 billion in 2004, among which the three major brands of Jing Wine, Yedao and Zhizhonghe occupied respectively around 1.2 billion, i.e. around 33% each, with an increasing growth of around 30%.

**It is estimated to reach beyond 6 billion by 2005.**

### **3.2.2 More Developed Provinces/Municipality in the Domestic Market**

Statistically speaking, the areas with more developed healthcare wine market include: Guangdong, Hunan, Hubei, Shandong, Zhejiang and Guangxi provinces as well as Shanghai municipality.

### **3.2.3 International Market**

Professor Suo Ying, the Chief Nutritionist at the Xuanwu Hospital, Capital Medical University stated that: Healthcare wine, besides being sold in China and the Southeast Asia market, is gradually moving into the global market and will expand its market development. Nowadays, there are increasing international interests in traditional Chinese medicine, e.g. treatments of cancer, allergy, arthritis, dementia, depression and diabetes, that are not only efficacious but also free from side effects. Therefore, western medical doctors are resorting to such remedial practices. For instance, the German medical authority has approved medical doctors to prescribe traditional Chinese medicine. Retrospectively, between 1988 and 1992, Canadian medical doctors convened two international natural medicine symposiums (including traditional Chinese medicine, acupuncture, pyonex, qigong and sitotherapy) in China. The World Health Organization promoted the integration of whole medical systems (traditional Chinese medicine and acupuncture) and modern medicine. In the USA, the government grants considerable funds to scientific research, e.g. application of *hypericum perforatum* to treat depression and *ginkgo biloba* leaves to treat dementia. Australians are expected to invest billions of US RMB in the complementary medicine research.

Hence, systematic development of healthcare wine is necessary. Thusfar, the few types that have been approved are restricted to general immuneregulation, falling short of disease prevention research. Should it be developed in the area of epidemic prevention for influenza, SARS, AIDS and tuberculosis, the future would be promising. In addition, developing healthcare wine for slimming, osteoporosis treatment, blood lipid regulation and blood pressure treatment is also an important path for complementary medicine in the case of frequent diseases to the mid-aged and elderly. At present, there is a growing morbidity of dementia in the domestic and overseas communities whereby the research and development of healthcare wine may not only benefit the public but also the domestic and overseas market.

### **3.3 Wine Market Development Trend**

With the uptrend of living standards, the public's sense of health care is intensified, hence raising new demand in the conventional wine industry. Healthcare wine, as the rising force in the wine industry, has entered the market and demonstrated great potential through this benefitting environment.

#### **3.3.1 Health Promotion through White Spirit (Baijiu)**

After the rapid development, the white spirit market has moved into the adjustment period with a drastic domestic decline of production and actual consumption. Under the environment of declining production and profit of white spirit, many white spirit manufacturers expanded their research and development to promote healthy consumption, thereby healthcare wine offers a new development direction.

With its intensified investment in the healthcare wine market, the Wuliangye Group invested over one hundred million RMB in 6 major brands of healthcare wine, including the Dragon and Tiger wine and Haokexiang (cordyceps militaris). Similarly, the Moutai manufacturer started on-shelf sales of Moutai Bulao Liquor. In addition, those with absolute market advantages, including Gulingshen Liquor, Changyu Supreme Treasure Spirit of Triple Testis and Yedao Lugui Health Care Wine, are competing to secure their market shares. The Guangdong market is a mature healthcare wine market where the healthcare wine consumption history and behaviour are most developed. The vintage brands profit in Guangdong, whilst the

new ones endeavour to build up their reputations. **Consequently, investment in the Guangdong market is an inevitable choice for healthcare wine manufacturers, old or new.**

The industry analysts indicate that profit margins for the entire white spirit industry are shrinking and, with the increasing taxation of white spirit, many large wine enterprises are seeking the next economic growth point, thus making the production of healthcare wine a priority choice.

### **3.3.2 Health Selling Point**

In the modern fashion of health care consumption, all wine enterprises have timely promoted the “selling point of health” whereby the new driving force for the development of wine industry is inserted.

Mr. Yang Zhong, the Vice Chairman of Guangzhou Wine Industry Association, indicated that from the perspective of product development structure, low-alcohol and nutrition will set the definite course for future product adjustment; the concept of “health care consumption” has become a trend for white spirit. Some experts believe that at present the wine market is gradually segmenting and it is generally being developed towards “quality”, “safety” and “health”.

Speaking of the long standing history of Chinese wine culture, healthcare wine has always been welcomed by the public due to both its remedial and health-preserving effects through generations and plays a key part in the Chinese wine industry.

Health is of constant interest in human life. With the constant elevation of living standards, the awareness of health care is increasingly amplified, thus showing the huge potential of the healthcare wine market.

### **3.3.3 Branding and Anticipation**

Alongside the increasing investment in the healthcare wine industry, assortments of rare medicinal materials and raw body parts of rare animals are being made into sundry healthcare wine. Faced by such rapid development of healthcare wine, a good number of consumers foster doubts.

It is understandable, through consumer behaviour, that the healthcare wine market is similar to that of healthcare products where there are shortages of true good products and brands as well as the products that reassure consumers with joy and comfort at purchase and with reliability after purchase.

Currently, within the Chinese healthcare wine market, rising enterprises are fiercely competitive, but healthcare wine brands with sizable scales are still limited. That is to say, with the public's growing awareness of health care, those able to stay ahead could create their national brands encompassing leadership and rallying power.

### **3.4 Four Major Predicaments in the Healthcare Wine Market**

Healthcare wine development is a long term subject that should be treated reasonably by all enterprises. **In the process, quality improvement is to be valued and a perfect combination of conventional industry and modern biotechnological engineering sought. A steady development must be maintained, otherwise haste makes waste.** (Mr. Shaoxun Wu, the chairman of the Jing Brand Group) There are over 30 thousand white spirit enterprises in China, whereas the outnumbered healthcare wine enterprises amount to more than a hundred, of which around 30 are licensed under the Hygiene-Food-Health system. **However, the available types of healthcare wine in the market are merely around ten. The entire healthcare wine market is still under development where continuous market challenges demand the constant attention of industrial insiders.**

#### **3.4.1 Product Challenges**

The rising health care awareness of the public provides a good prospect for the development of healthcare wine but such interest also leads to higher quality demand of healthcare wine. Challenged by the immature market of consumption, only those with top quality survive the pressure of market competition and establish unbeatable brands. This requires enhancement of research and development by the manufacturers to perfectly merge the traditional Chinese medicine and modern biotechnology. **Followed by a customised path of development and well defined target consumers, the research and development may result in personalised products for all age groups.**

Except tiger bone wine, consumers appear reserved in recognising the quality and effects of other types of healthcare wine. "Many healthcare wine manufacturers seek short-term profiteering, thus 70% of the consumers suspect the

**authenticity of** healthcare wine **ingredients**; 71% believe that nowadays most healthcare wines are made unscrupulously; 77% believe that the scope of treatment by healthcare wine is too broad to be true; 69% believe that among the healthcare wine consumers 37% has expressed the unstable quality and poor **taste** of healthcare wine; last but not least, 30% of the consumers report that the dissatisfactory **colour** of healthcare wine can result in an insecure feeling of drinking.” (according to a news survey) The image of healthcare wine is essential to the consumers. No one would be willing to purchase healthcare products that lack the value of effectiveness and sense of safety.

The current status is that 80% of healthcare wine seek similar effects, among which **an approximate 80% is set to be aphrodisiac, life-preserving, anti-immune and anti-fatigue.**

Can exquisite packaging conceal the product quality defaults? The Dragon and Tiger wine is often a sellout in the high-end market due to its exquisitely crafted bottles. Such “**craftsmanship and culture**” moved the Dragon and Tiger wine to the near-top of the market. Clothes maketh the man, just as saddles harness the horse. Exquisite packaging can undoubtedly incentivise consumption but it should not be the foundation of a market triumph, nor be a long term solution. A holistic approach, taking into account the product quality, remains the ultimate element.

The flavour is also one of the *sine qua non* elements that hinders the promotion of the healthcare wine market. Many consumers struggle to appreciate the flavour of wine since, firstly, consumers that were used to white spirit and beer found it difficult to accept readily the taste of healthcare wine; secondly, the taste of healthcare wine is unsuitable for communal drinking, unfit for ambiance and inadequate in a domestic social setting. To resolve this dilemma, two aspects can be considered. One is to alter the formula, hence changing the flavour. The other is to develop drinking techniques assimilating Chinese tea ceremony practices, where craftsmanship and culture can be cultivated, or the unique ways of drinking Huadiao Liquor (yellow wine).

### **3.4.2 Branding Challenges**

A market with great competition results in more business opportunities, thus without a competitive market success is hard to come by. Yedao Lugu, Changyu Sanpian and Chinese Jing Wine, as the major brands, have demonstrated promising development. Wuliangye and Moutai, as the magnates, have also announced respectively their huge investments in tiger bone wine and anti-aging wine. The ripple effect has vitalised the healthcare wine market. However, a mere few

active brands in the short run would be insufficient to consolidate the foundation of healthcare wine market, formulate a custom of market consumption behaviours and instigate a fashion for consumption. The healthcare wine market compared to the entire white spirit market is literally insignificant, encompassing a marginal market segment.

At the current stage, the Chinese healthcare wine market must introduce more competitive brands in the market. **Through the cohort publicity of healthcare wine consumption, the market is to be developed in joint efforts** so as to overcome the lack of competition. A benign and mature market of healthcare wine consumption can then be consolidated. Now, the enterprises should seize the opportunity to apply a flanking attack, take up the segmented market and establish their own territories. Otherwise, there will be presumed costs in making any tactical moves after the market becomes mature.

A survey result produced by the Ningbo FZERO Market Research Co., Ltd. indicates that “around 70% of consumers have ascertained their choices of brands prior to the purchase and complete accordingly their purchases; a mere 7.3% would change their choices at the physical market; another 23.6% would decide their choices of brands at the sale.” Therefore, it is evident that brands contribute significantly and are influential to the products.

**The healthcare wine market has not yet formed a market scale and the branding foundation is rather weak. Not only should more brands be introduced but also strong brands be built. Metaphorically speaking, without a minimum of 30% market in hand, the progression to market domination is unattainable.**

“Reintroducing” the tiger bone wine into the market will certainly induce huge impacts to the branding competition in the healthcare wine market.

### **3.4.3 Consumers’ Challenges**

To start, the common features of healthcare wine consumers (drinkers) have been concluded as: being middle-aged (30~50 years old), with stable career, being stressed at work, having ailment symptoms, being financially stable, being higher cultured and having better health care awareness. These are the common features of the healthcare wine consumers. Even as present buyers (the consumers of healthcare products), they will also need to first consider these features for the present receivers.

In fact, healthcare wine is a combination of “health care and wine” to a certain extent. “Health care” represents the efficacy and **“wine” acts as the carrier. They emphasise nutritious health care and provide nutritious supplements to protect**



**the health of the wine drinkers.** Should the efficacy of the products be exaggerated in the media, when the sought effects could not be attained and the actual remedial effects be unapparent after the consumers' intake, it would result in consumers' suspicion and disappointment and eventually cause consumers' reluctance to purchase healthcare wine and become a major hindrance of healthcare wine sales. Such publicity to make healthcare wine a medicinal product and exaggerate the efficacy is undoubtedly self-destructive and severely detrimental to the sound development of the entire healthcare wine industry.

Is the selling point of healthcare wine an efficacy-defined healthcare product or a drinking pleasure-oriented alcohol product? **Almost all healthcare wines are vaguely defined so that the entire line of healthcare products falls into the ambiguous state of neither being healthcare products nor wine products. How can a poorly positioned industry appeal to consumers for an uptrend mass consumption?** Therefore, Yedao Lugui endeavoured considerably in building the image of "health care expert" as a solution to this problem this year. Prior to 2005, the total annual sales of three of the top sale brands in Chinese healthcare wine market (namely Jingpai, Yedao Lugui and Zhizhonghe) were no match for those of a single white spirit brand, Jinliufu, nor did they exceed the total annual sales of a single healthcare product brand, Melatonin.

Is there an age limit for healthcare wine? As Jingpai described: "Middle aged men between 30 and 45 years old would have a family, children, career and meanwhile stress! Chinese Jing Wine can bring them healthy life, uplifting spirits, personal drives and hopes for success!" Nevertheless, after several tavern visits for end-user inspections, it is found that consumers also include the youth between 20 and 30 years old, even female customers. As a result, healthcare wine is not as absolutely segmented to certain consumers as the suppliers describe so. Apparently, such segmentation also restricts their own businesses. **Healthcare wine should be provided to moderately broader consumers, liberated from self-limitation and targeted for the youth and the middle-aged groups.**

At the moment, the healthcare wine consumption is not yet mature. Some of the consumers remain in the phase of perceptual consumption and the transition process to rational consumption is required. Although suppliers may consider a path to extend their brands and develop different products for different consumer groups, such path will be comparatively more time consuming.

### 3.4.4 Gifts Market Challenges

Over 80% of healthcare wine is targeted at the prime-aged and pensioners, who mainly drink a small quantity at home. How can there be economies of scale without the consumers' mass consumption? Although numerous healthcare wine enterprises have developed series of gift-oriented wines, the gift receivers from these consumptions are limited to the consumers' elderly friends and relatives who hold very little social interests. Neither could there be any breakthrough of passionate consumption from the gift sales volume nor could it be from the gift intake volume.

Melatonin has instigated the fashion for healthcare product gifting and led on other brands to take part in the popular market. Whereas, healthcare wine entered the gifts market with a hybrid identity of half health care and health wine. But healthcare wine competing in the gifts market always gives the consumers a sense of being unfit for purpose. First of all, consumers generally know that any one single healthcare product is more efficacious than healthcare wine, hence healthcare wine is no rival to healthcare products; secondly, the denomination of healthcare wine often causes embarrassment as gifts that either have Triple Testis spirit or Jing wine as their title can be euphemistic; thirdly, the gifting concept of healthcare wine consumption is thin and the propensity to consumption is weak. Therefore, in terms of gifts, healthcare wine is not as popular as healthcare products. For drinking, it is less popular than white spirit. In addition, due to its uniqueness, the future development of healthcare wine needs to be clearly positioned.

Yedao Lugui entered the gifts market through promoting the family bonding ideas. Although by carrying a long standing gift-oriented image Yedao Lugui Health Care Wine had once been the leading figure in the healthcare wine market, it did not settle in the gifts market as its final business destination but invested immensely in the food and drink businesses where family and personal uses are targeted as its final business venue. Although Chinese Jing Wine is also competing in the gifts market, its prevailing market is its application in the food and drink businesses and personal use. Chinese Jing Wine is considered the first to introduce healthcare wine to the food and drink businesses and currently the best in such operation.

Based on the (2002) Zhejiang market survey result produced by the Nongbo FZERO Market Research Co., Ltd., the sales figure of healthcare wine used as gifts for relatives and parents dropped more than 10% but as personal use the figure climbed more than 10%. "Therefore, although currently the healthcare wine is mainly targeted at the gifts market, the

general propensity of consumption is increased through personal intake, whereas it is attenuated in the gifts market. Consequently, **the communication strategy of healthcare wine should reduce its focus from capacity building in the gifts market and enhance the development and market share of the consumers that partake of it on a day-to-day basis.**”

Whether the gifts market acts as “chicken ribs” (of little importance but wasteful if disposed) in the current healthcare wine market development, the healthcare wine industry itself knows the best. Used as a nutrition supplement, healthcare wine should be promoted through the conceptualisation of health care value and induction for consumers’ daily use. The gifts consumption can only reflect the feature in the current development but not a long term one.

### **3.5 Competition Analysis**

From 2001, the market capacity of Chinese healthcare wine started its unprecedented growth of 30% each onward year. Meanwhile, many renowned white spirit brands and other capitals from different industries also entered the healthcare wine market.

In the restructure of the white spirit industry, healthcare wine conversion is a clearer direction. In recent years, the healthcare products market is in an era of keen competition. The comparison and analysis of “4 major brands” in terms of the brand integration backgrounds and consumption positioning are laid out as below.

#### **3.5.1 Chinese Jing Wine and Yedao Lugui Health Care Wine**

These two brands are the most professional and integrated healthcare wine brands in terms of marketing and promotion in the domestic market in recent years. They are ranked respectively the first and second brands; both are listed companies with robust capitals; both target the same end consumers, namely the **middle market**. However, their dissimilarities are conspicuous as well.

Chinese Jine Wine: Mass Production, Stable Development.

▲ Promotion Channel: in the induction phase, **activating food and drink businesses** at the user-end, **entering into both wholesale and retail sales, outreaching to families;**

▲ Market Strategy: breaking through in the core metropolitan areas and taking advantage of the fringing effects to

vitalise markets in the surrounding counties in a prudent and vigorous care so that the development can be vertical in towns and villages for a holistic coverage approach;

▲ Product Portfolio: using small bottles of 250ML as the leading product, establishing distribution networks , regulating and stabilising prices alongside the promotion, introducing large octagonal bottles and packing parallel to the stabilised target market, continuously ameliorating and consummating the vertical development and thorough coverage of the products with the foundation of a vertically developed market;

▲ Weaknesses and Opportunities: the branding and product images are considered mediocre so the branding improvement and product image repositioning and promotion are the current tactic priority for Chinese Jing Wine, thus representing opportunities;

Yedao Lugui Health Care Wine: Precision, Triumph and Commanding Heights

▲ Market Strategy: first securing the high-end and rather mature **East China market**, secondly the Midlands and then Beijing market. The tripods of East China, Midlands and Beijing comprise the 2-dimensional interpenetration of market. When appropriate, depending on the metropolitan opportunities for market success, urban commanding heights can be selectively attained. The integrative promotion by way of stability, precision, fervency and agglomeration has formulated a successful exemplar in the metropolitan markets for healthcare wine. For instance, the Yedao Lugui Health Care Wine takes the top sales for more than 70% of the market share in the Shanghai healthcare wine market;

▲ Product Portfolio: using the high-end Yedao Lugui brand as the lead to secure the market commanding height in advance and introducing low-end products upon market maturation. For instance, the Yedao Neptune Wine released in 2003 was ranged around 25 RMB per bottle whilst Yedao Lugui was priced between 35-45 RMB. Meanwhile, the capacity of Yedao products was introduced first at a large volume (500ml), followed by the smaller volume. It is completely different from Jingpai's product strategy of "low pitch to high nudge", instead, a more scientific strategy of "high nudge with low pitch" is used. The "low pitch to high nudge" is similar to "big pony-driven carriages" whilst the "high nudge with low pitch" is similar to "small horse-driven carriages". In terms of product portfolio and marketing, Yedao Lugui demonstrates more in-depth and solid consumption stamina and potential than Jingpai.

▲ Promotion Channel: selling the gift-oriented wines in the super stores in the induction phase, subsequently the food

and drink businesses, followed by the wholesale and retail sales;

▲ Weaknesses and Opportunities: The introduction of Yedao Neptune Wine was rather deterred while, after the channel of Yedao Lugui Health Care Wine has attained the commanding height, the channel wasn't actively lowered (i.e. consumers in demand could not purchase at the destined city). Therefore, it is too late to lower the production line and channel when the brand became maturised and declined; Opportunities: depending on the market demand and consumer class, the packaging, class, pricing and capacity of Yedao Lugui Health Care Wine were refined in its positioning, thus when the commanding heights of the core target cities were secured it outreached to the peripheral areas; while the product integration of Yedao Lugui series can be envisaged as being entered into the mature phase, other lower-end branding can then be introduced, such as the Yedao Neptune series of products.

### 3.5.2 Moutai Bulao Liquor and Wuliangye Dragon and Tiger Wine

Did the national liquor, Moutai, and the industrial magnate, Wuliangye, put on a fight or did they both envisage the great opportunity for the Chinese healthcare wine in the new century? Both strong brands released high-end healthcare wine of high quality and high prices almost at the same time. The magnitude of promotion was in equal competitiveness.

Moutai Bulao Liquor: System Brings Success, Success Requires Control

▲ Core Product Positioning: **high-end gift liquor**. Being worthy of the legendary national liquor, Bulao Liquor demonstrated robust competitiveness as soon as it entered the market and outweighed many prestigious white spirit brands.

▲ Promotion Strategy: based on the branding advantage and emphases of cultural and end-user infrastructures of the Moutai Group, it has set up **distribution and franchised stores as the major marketing networks** at key national locations. At present, the development is at a scale of 100 odd such stores. The company's manager stated that: up to present, it is still a product in growth and there is no rush to transform overnight into the Moutai of healthcare wine. A perpetual strategy to promote the Moutai Bulao healthcare liquor is to be consistent in developing a standardised brand.

▲ Weaknesses and Opportunities: different production lines of the same brand are subject to different agents to operate in the national market. **For Moutai Bulao gift series, there are simply different agents for 400ml, 500ml, 600ml and 800ml products distributed in Guizhou, Guangdong and Liaoning provinces. Each specification comes in different styles and the**

packaging varies diversely as well. Such a business model has inevitably increased the difficulties for centralised control by enterprises; and the packaging of varying quality as well as the overly rapidly changing packaging styles of some products are counted against the formulation of a uniform and good brand image in the market. Therefore, unifying the VI system of Moutai Bulao Wine series, establishing a centralised brand promotion center and implementing a uniform commanding height of cultural branding strategy are the only tactic opportunity to achieve Moutai Bulao Liquor's "System Brings Success, Success Requires Control" objective.

Wuliangye Dragon and Tiger Wine: Magnificence, Rigorous Management

Positioning: The dragon and tiger combination is a typical and substantial reflection of the magnate's advertisement, "In my magnificent country, nothing supercedes the choice of Wuliang(ye).", which is apparently the most appealing and competitive brand. **Positioning: modern high-end nutritious white spirit**, which is a knock-out product as a key development while the Wuliangye Group was in search of a new white spirit market direction. Since its market release in 2002, it has been most popular and has also become a modern successful white spirit business model within 2 years.

### **3.6 Competition Strategy Analysis**

From the two major types of healthcare wine brands, as aforesaid, and the current status and challenges of the entire healthcare wine market, it is facile to sum up what breakthrough measures are needed in the Chinese healthcare wine market.

#### **3.6.1 Cultural Promotion Strategy of Healthcare Wine**

▲ **Social Background:** With the rapid development of globalisation and information technology, the social environment has become more complex, disturbing, fast changing and turbulent. What comes after is shrinking business lifespans and lack of security for marriages and families. Hence, the basic elements of social existence are afflicted by anxiety, intolerance, paranoia and even psychopathia. In such social context, people's alcohol consumption behaviour also changes significantly.

▲ **Consumption Background:** To survive, alcohol appears to be the most effective and easily attainable means for

socialising purposes, which encompass a wide range of reasons as to why one cannot avoid drinking. As is widely known, excessive alcohol intake is detrimental to human livers. But under certain circumstances, making oneself or others inebriated can be a simple mental pleasure. Self-inebriation is a form of extrication and making others drunk can be a visual entertainment. This is the true essence of the drinking culture – alcohol hedonism. However, the pursuits of longlife and health are also human instincts. Therefore, the enormous potential of consumptive demand gradually surges.

▲ Humanistic Wine: It is a type of drinking alcohol that does not reduce the drinking pleasure and may reduce the detrimental effects. It is neither a typical white spirit nor conventional healthcare wine but a humanistic wine that is sublimated from a type of white spirit.

### **3.6.2 Product Positioning Strategy**

Based on the consumption interface of white spirit in conjunction with the integration of one's own brand power and market position, the image product (product identity), leading product and mass produced product can then be positioned. For instance, Moutai Bulao Liquor and Quliangye Dragon and Tiger Wine are both positioned as the high-end brand wine, whereas the Yedao Lugu Health Care Wine and Chinese Jing Wine are positioned as the middle-ranged healthcare wine.

### **3.6.3 Channel Strategy**

For healthcare wine charged at above 35 RMB per bottle as the end-user price, the channel commanding height must be secured in the induction phase: **restaurants, gift packs and circulating products may be commercialised subsequent to the super stores and the distribution may be thoroughly deployed at a later stage of market growth.**

### **3.6.4 Consumer Positioning Strategy**

It caters not only to the middle-aged and pensioners as a life preserving beverage but also to alcohol drinking enthusiasts; besides befitting romantic occasions, it is also suitable for guests that are not accustomed to drinking white spirit.



### **3.6.5 Drinking Induction Strategy**

It can be consumed in small quantity sips or large quantity gulps with the option of adding some ice.

### **3.6.6 Consumption Environment Strategy**

Regardless of family gatherings, quiet outdoors evenings, heartfelt reasons or social/commercial gatherings in drinking venues; regardless of small drinking venues, roadside food stalls or pleasant travels; and regardless of night clubbing or romantic meetings in bars, healthcare wine will be provided with care whenever and however.

Should all the above strategies be executed, the market growth of Chinese healthcare wine would definitely surmount much higher than the current 30% each year.

### **3.7 Healthcare Wine Consumption Behaviour Survey**

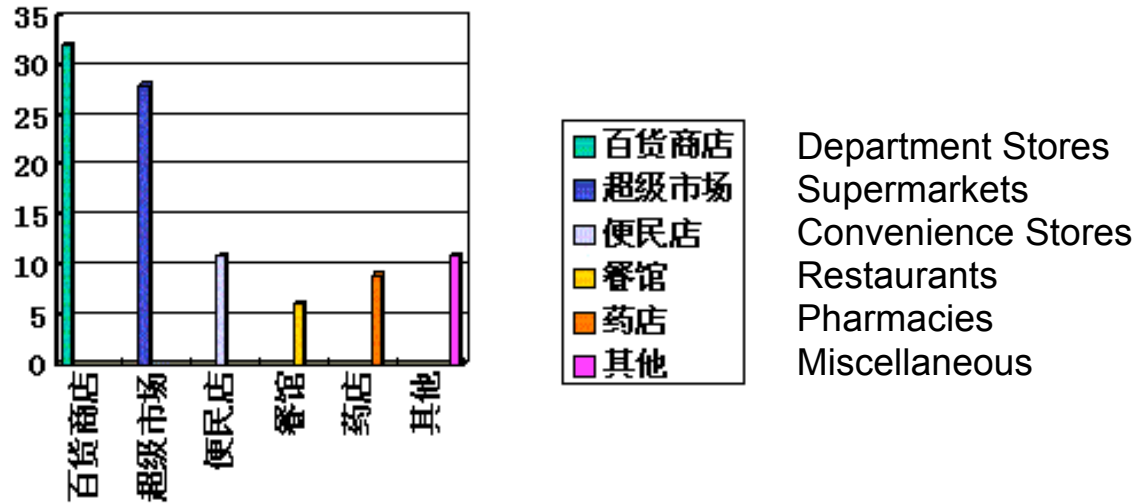
According to a recent survey produced by HWChina.com, **the consumers mainly purchase healthcare wine products in department stores, followed by supermarkets, and both channels take up 60% of the entire distribution.** Compared to supermarkets, there are more varieties of products in department stores where consumers may compare products and be provided with more choices. Moreover, in terms of healthcare wine products, a brand's popularity is essential. Consumers usually search for the healthcare wine products of which they have more knowledge at first, then they check whether those products come with certain effects before their purchases. In addition, department stores and supermarkets provide larger scale businesses with legitimate distribution of goods and stronger reliability, thus providing comfort to consumers. Therefore, while expanding their popularity, the healthcare wine suppliers should focus their sales on large malls and supermarkets where most consumptions are made for the sake of gifts, rather than personal use.

A minority of consumers purchase healthcare wine products in convenience stores. For a convenient purchase, these consumers often recognise a single brand and disregard products of other brands. They are generally loyal consumers of a certain healthcare wine brand.

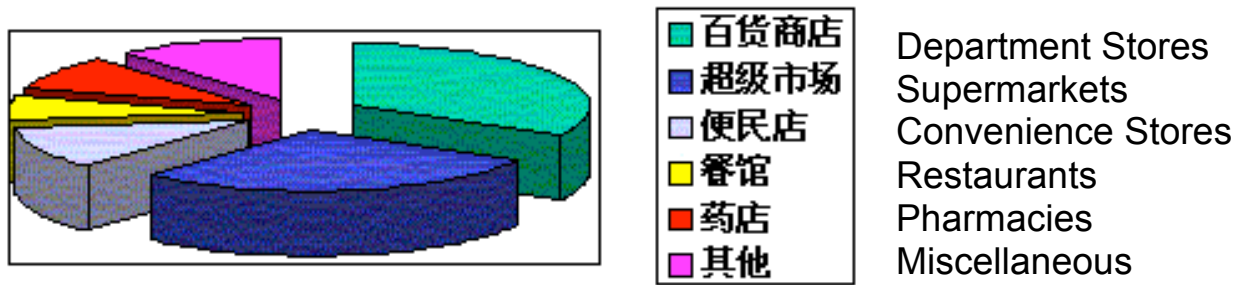
Consumers who purchase healthcare wine in restaurants, pharmacies or other venues account for one third of the market. These consumers often purchase healthcare wine by fortuity or at random, and in most circumstances by word of



mouth with little knowledge of the products. They are usually novice consumers. Healthcare wine manufacturers and distributors should also place importance on this consumer group.



Graph 2 Healthcare Wine Distribution Statistics Bar Chart



Graph 3 Healthcare Wine Distribution Statistics Pie Chart

### **3.8 Healthcare Wine Market Operation**

The pertinence of healthcare wine pricing and functions determines that healthcare wine should develop a different route from other types of wine for market operation.

#### **3.8.1 Distribution Infrastructure – Practical Delaying**

In the last couple of years, most healthcare wine products are being channelled towards taverns. The tavern distribution allows more opportunities for the one-to-one marketing so as to truly impart the product information on consumers. However, in super store distribution, due to the impact of multi-optional products, the amount of information on a single healthcare wine product received by consumers is dispersed by other products. Similarly, pharmacies and taverns are facing the issue of information dissemination efficiency. Therefore, when building the distribution infrastructure for healthcare wine, more attention should be geared towards practical customer development and at the same time the centralised product market system should be restructured to create decentralised and efficient operation teams.

#### **3.8.2 Advertising Efficiency**

The advertising of healthcare wine should be free from the broad tactic of carpet “bombing”. It is not to deny the effect of “bombing” but the nature of information to be disseminated should be clarified before engaging in large scale branding propaganda where **there must be pertinence to the disseminated product promotion information.**

#### **3.8.3 Promotion Objectives**

Many market operating professionals see promotion as a process of product sales but actually, in terms of healthcare wine, its market development is still in the start-up stage and mainstream market consumption is still in the distant future. While waiting in the twilight zone, all market operating personnel should pace themselves to avoid “haste makes waste” and bear in mind that brand building is the ultimate objective for promotion.

### **3.8.4 Innovation and Development**

The existing healthcare wine branding operation is similar to that of 500 years ago, with an additional modern touch. There is no innovation, nor development. In business practice, there is no reference for healthcare wine and the market opportunities are solely dependent upon enterprises' decisions.

Subsequent to the Moutai and Wuliangye's big investments, healthcare wine has entered into the competitive era where there are market opportunities for anyone to make a winning pre-emptive strike. The healthcare wine industry is calling for the crown bearer! Tiger bone is likely the one!

### **3.9 Healthcare Wine Strategic Consideration – Selling Health Care or Wine**

Allegedly, people blame the bad healthcare wine sales on the wrong choice of carriers since most people in need of health care avoid alcohol. However, presumably a reversal question may be posed as to why the concept of “alcohol consumers drink for health” has not been introduced. Mostly Chinese people drink at social occasions. The liquid in the glasses is a catalyst for human bonding. Although the emphasis of health may ruin the pleasurable ambience at the drinking table, introducing healthy drinking can otherwise add a touch of health care without jeopardising the atmosphere. What is wrong to have it all? Three of the core objectives of healthcare wine are laid out below:

#### **3.9.1 Medicinal Properties**

Placing more weight on the functional research and curative development makes healthcare wine a more function-oriented professional product with more practical values but, after all, there are limitations to healthcare functions. When consumers purchase healthcare wine as a curative product, which may only deliver little effect in this case, it can easily disappoint consumers. Such disappointment is a major resistance to the development of healthcare wine.

### **3.9.2 Perceptivity**

Lateralising importance on developing and inducing the perceptual consumption hotspot of the product delimits healthcare wine's image of being an elderly-oriented product, hence popularises it. But, restricted by consumers' traditional view, the healthcare wine industry is unlikely to complete the induction of perceptual consumption in the short term.

### **3.9.3 Nutrition**

In delivering the nutritional values of healthcare wine, the emphasis is being shifted from healthcare wine being a privilege to those who desire health to it being the key to reach out for more nutritional values. Subsequently, the ongoing nutritional insertion gradually forms a consumptive fashion towards perceptivity.

In market practice, many healthcare wines are emulating the operations of healthcare products, thus making them neither wines nor healthcare products.

### **3.10 New Opportunity and Prospect Analysis of “Tiger Bone Wine”**

In the undergoing restructure of the white spirit industry, shifting towards healthcare wine market is a clearer direction. Revitalising the longstanding healthcare wine brands will bring profits to the development and manufacturing enterprises. Speaking of the early iconic healthcare wine brand, the one of a higher reputation is the “Tincture of Tiger Bone Comp.”, which was mainly applied in Chinese medicine for traumatic injuries with a long standing history. Later in time, tigers became a national treasure and the government banned tiger poaching. Then, the “Tincture of Tiger Bone Compound” disappeared from the market but its market reputation remains. According to professional survey, a good number of the prime-aged and elderly consumers still miss the “Tincture of Tiger Bone Compound” and have high expectation of it. Therefore, developing a “Tiger Bone Wine” brand entails a great market potential. In this regard, with the socioeconomic development and higher living standards as well as the longing for quality of life and well being, including health and long life, human beings gradually pay more and more attention to cultural tastes in life and personal nutritional health care. Consequently, the Hunan Sanhong Pharmaceutical Company Limited pooled advantageous resources and, with strong support from the government at all levels and administrations, a True Tiger Wine series of tiger bone wine brand was born

based on classic medicinal formulae under careful research and development by an authoritative institution. Said series mainly caters to the board audience of wine lovers as well as the middle-aged and pensioners suffering from rheumatism, rheumatoid diseases and arthritis. It is a green healthcare wine product that is effective for disease prevention and remedy as well as life preservation and health care.

### **3.10.1 Strength Analysis of True Tiger Wine**

Since the sixties, a saying “North Tiger Bone Wine, South Deer Turtle Wine” started circulating in the Chinese healthcare wine industry. It is evident that the tiger bone wine market is publicly praised. Based on a professional survey on 500 selected supermarkets, hypermarkets, convenience stores and large food stores in Hunan Province, among the middle-aged and pensioners group, 82.8% consumers who have partaken of tiger bone wine approved of it.

#### **1 Tiger Bone Wine is a Tonic Boutique**

Living in the modern world, the situation of “there can be no stop when drinking with soulmates” always allows people to outcry their love-hate emotions. Li Shizhen listed 69 different effects of medicinal wine in “Compendium of Materia Medica”. The ingredients of tiger bone (*os tigris*), pilose antler (*cornu cervi pantotrichum*), deer bone gelatine (*colla os cervi*), tortoise plastron gelatin (*colla plastrum testudinis*), pilose asisbell root (*radix codonopsis pilosulae*), Chinese angelica root (*radix angelicae sinensis*), Chinese wolfberry (*lycium chinensis*), fleece flower root (*radix polygoni multiflori*) and licorice root (*radix glycyrrizae*) are the common medicinal materials in the wine.

The tiger bone nutritional formula has a long history. The modern medical research institutions believe that the drinking practice of “**disease prevention and remedy, life preservation and health care**” the True Tiger Wine promotes is one of the best ways for healthy drinking. Being developed jointly with the modern wine making craftsmanship and advanced technology, the True Tiger Wine will successfully steer the healthcare wine industry into the future.

## 1 True Tiger Wine is the Fashion of Medicine and Wine

At present, there are over 4000 healthcare wine manufacturers in China. Among them, over 500 manufacturers, and thousands of brands, have been granted the “Hygiene-Food-Health” product license. But the truly nationally renowned ones can be finger-counted. In the competitive market, the most direct way to resolve the crux of industrial satisfaction is to “apply medicine making standards to wine making”, which is the principle the Hunan Sanhong Pharmaceutical Company Limited promotes. In addition, the necessity to uplift the integrity standard of the current healthcare wine industry as proposed by said Sanhong Company will help meet the forecast target of good sales for the True Tiger Wine brand. The “Guidelines for Health Food Product Registration” as promulgated by the State Food and Drug Administration (SFDA) has been effectuated. Just as with medicine, rigid hardware standards regulating production plant, finished product warehouse and factory environment apply to healthcare food products. Manufacturers must be GMP certified to manufacture and sell. While the industrial standards are being set forth, the manufacturer of True Tiger Wine will also strive to be one of the domestically GMP certified manufacturers.

## 1 Resourceful Strategy for Success

Simply speaking, the Sanzhen Company can legally acquire tigers and the Sanhong Company can legally acquire tiger bones. Therefore, the Sanhong Company can acquire tiger bones from the market as well as tiger bone specimens from the Sanzhen Company. In addition, the Sanzhen’s tiger incubation base provides a strategic foundation for the Sanhong Company’s direct acquisition of tigers. The resource of tiger bones holds the winning chip. Accordingly, the tiger bones required for this production item come from the Sanzhen Company.

## 1 Brand Power of Health Development

The industrial insiders believe that, with popularised health perception, healthcare wine bears revitalised business opportunities. Through the endeavours to successfully develop the unique formula, advanced manufacturing technologies and differentiated brand-new advertising campaign, the True Tiger Wine will swiftly take up the high-end Chinese healthcare wine market and retrieve consumers' reliance on the vast Chinese healthcare food market.

At the moment, the Sanhong Company is the only licensed enterprise in running tiger bone wine businesses and immensely advantageous in the publicity of its brand.

### **3.10.2 Conventional Healthcare Wine Strengths**

Being the vintage healthcare wine in market circulation, the conventional healthcare wines bear their own specific features. In addition, they have secured a stable quota in the Chinese market and hence remain rather competitive in the Chinese market.

### **3.10.3 Conventional Healthcare Wine Weaknesses**

1. The Chinese conventional healthcare wine must adjust its marketing strategy in accordance with the actual situation in the local market because with the lack of a low-end product strategy and consumers' suspicion countermeasure in the current healthcare wine industry will hinder the next development of conventional healthcare wine in the Chinese market.
2. Most conventional healthcare brands, due to falling short of capitals, market analysis capacity and professional campaign wine, have merely been invested with small capitals to promote its market, thus unable to conjure up strong brand effects.
3. The newly surged Chinese healthcare wine enterprises rely on their vast capitals, latest manufacturing technologies, low cost, more befitting flavours and strong product advertising and promotion, hence bringing forth challenging impacts against conventional healthcare wine.

4. Not many consumers know how to properly partake of healthcare wine and **most consumers are unable to distinguish the actual functions of all types of healthcare wine.**

### **3.11 Market Risk Analysis**

The True Tiger Wine is a medicinal healthcare wine. Due to its effective functions for disease prevention and remedy as well as life preservation and health care, the production item is compliant with domestic industrial policy and belongs to a sustainable domestic industry, which serves to drive the industry with promising expected utility. However, due to the rather complex system engineering in developing, producing and selling the True Tiger Wine, effective control of project risks must be employed.

#### **3.11.1 Legal and Policy Factors**

Tiger bone wine is a special healthcare wine that uses the medicinal values of protected animals, such as tiger bones. Nonetheless, these animal medicinal materials, like tiger bones, are subject to rigid laws and regulations. At present, the company has been licensed to run the manufacture. The parent company, Changsha Sanzhen Animal Artistic Specimens Company Limited, has also been permitted to set up a tiger incubation base where a legal source of tigers can be obtained by breeding the third-generation tigers. However, the company must also pay serious attention to policy development studies to actively be in strategic control.

#### **3.11.2 Pressure Group Factors**

There are international animal protection organisations and institutions that hold strong views against the Chinese open policy of protected development of rare animals. Under the current WTO domain, our protection-facilitated development must be sensibly paced by taking in international voices and tuning in good development strategy to avoid negative impacts.



### 3.11.3 Brand Factors

There is a high market expectation of the True Tiger Wine, so the guaranteed efficacy of active ingredients must be persisted, customer care exercised, brand reputation consistently maintained, counterfeit rigorously prevented and reduction of active ingredients for lowered cost perseveringly resisted.

### 3.11.4 Influencing Factors of the Incubation Base

Due to tigers being the wildlife under first class national protection, wildlife tigers are protected from being hunted or commercial trading. But tigers are also a rare animal and a type of regenerative resources, meaning that tiger products can be thoroughly attained through captive breeding. The True Tiger Wine relies on the Hunan Sanzhen Tiger Incubation Base (a planning area of 1,100 acres) for its long term development strategy. And rightly so, the base is materially influential to the sustainable development of the True Tiger Wine.

### 3.12 Market Positioning Strategy of the True Tiger Wine

The True Tiger Wine is delicately made in line with a strict fermenting procedure under a careful ratio mixed with the main ingredient of tiger bones and prescriptive ingredients of rare flora and fauna. It presents a purified colour; once opened, the full-bodied aroma permeates all corners with fragrance; and it delivers a refreshing taste, enriched flavour, softness, sweet smoothness, dainty and heart-felt nourishment through the mouth. It manifests effects that water the mouth, revitalise the circulation, re-energise the mind and benefit the energy flow.

Through the experts' large volume of target consumption market survey, with considerations of the raw material's rarity and irreplaceability as well as the unique medicinal healthcare functions, the True Tiger Wine shall be positioned as a medium-to-high-end healthcare wine. Such positioning is required not only for the cost and profit budgeting but also the differentiated brand campaign in the current healthcare wine industry (as aforementioned).

The True Tiger Wine is the new generation from the oldest healthcare wine brand and a perfect combination of the Chinese and international conventional healthcare wine advantages. By appropriately taking advantage of the current

powerful means of media to carefully build up a new medium-to-high-end healthcare wine brand, the branding success is envisionable.

Product Objective: **“Disease Prevention and Remedy, Life Preservation and Health Care”**.

### 3.13 Product Portfolio and Pricing Strateg of the True Tiger Wine

Through expert consultation and market research, and learning from strong brands in the market, the company has initially determined to develop 7 products under the two major series of Jingpin (boutique) and Haohua (luxury) in order to meet different market needs. Based on the medium-to-high-end positioning, the products prices are correspondingly arranged, as indicated in below table:

Table 2 Product Portfolio and Pricing Strategy

No.	Series	Specification	Ex-works Price	Market Price
J1	Jingpin Hongxing (Boutique Red Star)	1*250ML	270 RMB/Bottle	450 RMB/Bottle
J2	Jingpin Yinxing (Boutique Silver Star)	1*500ML	528 RMB/Bottle	880 RMB/Bottle
J3	Jingpin Jinxing (Boutique Gold Star)	2*500ML	1032 RMB/2Bottles	1720 RMB/2Bottles
H1	Haohua Lanxing (Luxury Blue Star)	1*250ML	420 RMB/Bottle	700 RMB/Bottle
H2	Haohua Hongxing (Luxury Red Star)	1*500ML	768 RMB/Bottle	1280 RMB/Bottle
H3	Haohua Yinxing (Luxury Silver Srar)	2*250ML	792 RMB/2Bottles	1320 RMB/2Bottles
H4	Haohua Jinxing (Luxury Gold Star)	2*500ML	1512 RMB/2Bottles	2520 RMB/2Bottles

The Haohua series will mainly cater to satisfy the gifts market. The core value of the product is determined by the level of tiger bone content, hence the higher the content the higher the price.

### 3.14 Producibility Design of the True Tiger Wine

According to the research of market demand, the first major demand is the efficacy – chronic disease treatment, e.g. rheumatism; the second is gifts; and the third is curiosity – drinking wine that is made of tiger bones. Although there is a high market demand, when considering the production volume being restricted by tiger bones and receiving the experts and leaders’ guidance on stable development and quality assurance, the company has based the pilot production on 200 tons per annum to preliminarily ascertain the kick-off capacity of this project – annual production of 800 tons, with 4 production line

establishments. Based on the current company’s stock of tiger bones, the going concern for the True Tiger Wine is secured for more than 5 years. In 3-5 years, the Sanezhen Tiger Incubation Base will be able to provide the advantageous resources for the continuing development.

When the project funding becomes sufficient, the company may expand its domestic acquisition of tiger bones, under licence, to satisfy the needs of manufacture expansion and ongoing production.

The optimised allocation plan of all products is laid out in Table 3. Based on the ex-works prices, meeting the production target will bring forth a production value of over 1 billion RMB. It is predicted to take up **10% of the market share** as a rather reserved target.

In accordance with the market response of hot sales, monthly production does not basically require storage, thus showing a good status of 100% production sales.

**Table 3 Product Allocation Plan**

Series No.	Weight ( 10,000 KG )	Set/Bottle No. ( 10,000 )	Production Value ( 10,000 RMB )	Remark
J1 Jingpin Hongxing	20	40/40	10800	10.25%
J2 Jingpin Yinxing	50	50/50	26400	25.06%
J3 Jingpin Jinxing	10	5/10	5160	4.90%
H1 Haohua Lanxing	20	40/40	16800	15.95%
H2 Haohua Hongxing	40	40/40	30720	29.16%
H3 Haohua Yinxing	10	10/20	7920	7.52%
H4 Haohua Jinxing	10	5/10	7560	7.17%
Total	160	190/210	105360	100.00%

### **3.15 Market Analysis Conclusion**

The Hunan Sanhong Pharmaceutical Company Limited has the technology, resources and capacity to run the long term production lines and sales of “True Tiger Wine” with great market potential and the right operational strategy, thus providing a feasible market.

## Chapter 4 Project Execution Plan

### 4.1 Existing Project Execution Conditions

1. One True Tiger Wine production line with an annual capacity of 200 tons;
2. The True Tiger Wine formula has been certified and the company is rendered a manufacturing permit: under Hunan-Hygiene-Food Manufacturing License No. 001 (2005);
3. The stock of tiger bones will supply 5 years of production for the company;
4. There are ancillary facilities, e.g. soaking and extracting devices, water purifying device and automated bottling line;
5. The processing technology of the True Tiger Wine production has been certified as compliant with enterprise standard, under the Standard No. Q/ACZK001-2004
6. The trademark registration of “True Tiger Wine” has been submitted for approval.

### 4.2 Legal Compliance of the Project

Forestry-Protection-Issuance No. 139 (2005), “Notification Concerning the Pilot Run on Medicinal Use of Captive Breeding Tiger Bones to Reduce the Use of Leopard Bones” rendered by the Joint Circular of the Five State Ministries and Commissions

Animal Protection Notice No. 93 (2005) rendered by the State Forestry Administration

Administrative Notice No. 30 (2005) asserted by the State Forestry Administration

“South China Tiger Rescue Action Plan of the P.R.C.”

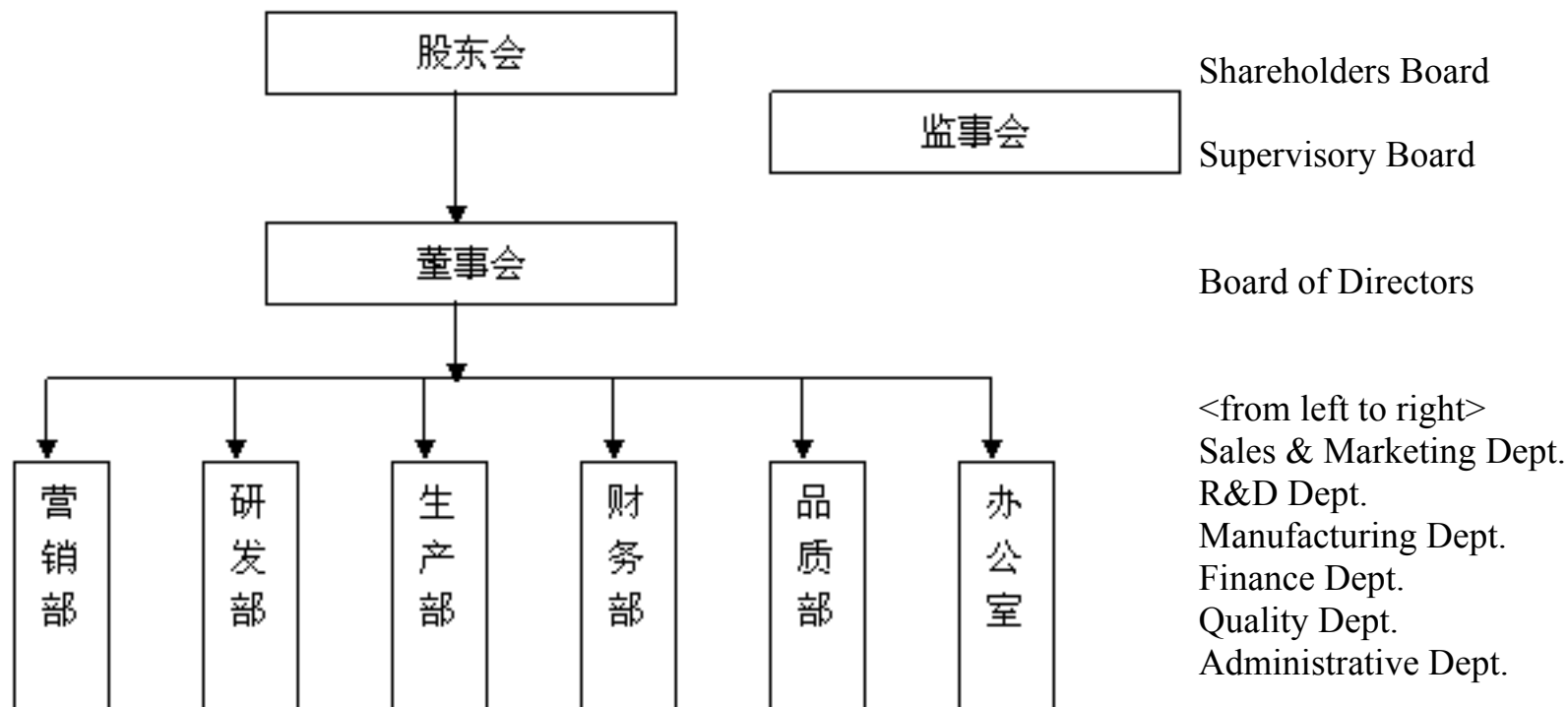
“Regulations of the People's Republic of China on Wild Plants Protection”

“Notification Concerning the Practice of Tiger Bone Healthcare Wine Manufacturing Project”

### **4.3 Project Execution Organisation**

Hunan Sanhong Pharmaceutical Company Limited was established in May, 2005 with a registered capital of 2 million RMB. The business covers: alcohol development, production and sales; bio-product development. The company founders include experts involved in running rare flora and fauna businesses for over 10 years with in-depth know-how. Together with the advantageous reliance on the abundant animal resources supplied by the parent company – Changsha Sanzhen Animal Artistic Specimens Company Limited makes it the only enterprise holding the permit to produce tiger bone wine in the country.

#### **4.3.1 Company Organisation**



Graph 4 Organisational Chart

The company implements the standardisation of modern enterprise management, actively facilitates quality guarantee system and strictly complies with all standards.

#### 4.3.2 Managerial and Technical Teams

In the light of the parent company's longstanding operations, the company has established managerial and technical teams that are highly efficient, team-spirited, and competitively oriented. The development of managerial personnel is estimated to reach the capacity of approximately 25 people. To date, the main manpower includes:

Zhu Yicheng, Male, President, Managing Director and Senior Process Engineer;  
Zhang Youping, Male, Senior Accountant;  
Zhu Yugang, Male, Deputy Managing Director;  
Chen Lifeng, Male, State-level Research Fellow;  
Li Shunxiang , Male, State-level Research Fellow.

#### **4.4 Project Execution Objectives and Emphases**

##### **4.4.1 Objectives**

1. To acquire a land of 100 acreage
2. To build in 3 additional production lines, each with the capacity of producing 200 tons of the True Tiger Wine; together with the existing production line, the scale of production will reach an annual capacity of 800 tons
3. To build a manufacturing plant covering an area of 12,000 square metres and anciliary constructions
4. To establish a marketing system to make the total sellout of annual finished products, reaching the sales over 1 billion RMB
5. To raise the project funds for the start-up capital of 50 million RMB

##### **4.4.2 Project Execution Emphases and Obstacles**

The key is to establish a marketing system, realising the business objectives for the company. The difficulty is to raise the project funds for the start-up capital.

In addition, during the production process, the preventive care of fire and explosion must be taken seriously to ensure safe production.

## 4.5 Project Execution Procedure

Formulate Project Strategy   Substantiate Project Funds   Purchase of Land   Construction of New Plant and Facilities

Strategic Management   Marketing   Mass Production   Installation and Commissioning   Addition of Production Lines

Graph 5 Project Execution Flow Chart

## 4.6 Project Milestone Plan

With the construction kick-off point being the time when the start-up capital becomes fully available:

1<sup>st</sup> ~3<sup>rd</sup> month: To process the land purchase and complete the inspection, design and application of construction procedure.

4<sup>th</sup> ~9<sup>th</sup> month: To complete the construction and ancillary work;

10<sup>th</sup> ~12<sup>th</sup> month: To perform commissioning and complete the final acceptance of the production lines and facilities so as to consummate the manufacturing preparation;

13<sup>th</sup> month: To activate 3 production lines; to move the existing production line and complete the installation and commissioning;

14<sup>th</sup> ~24<sup>th</sup> month: To activate the 4<sup>th</sup> production line and gradually achieve the goal in producing 80 tons a month;

25<sup>th</sup> month onward: To stabilise the annual production of 800 tons and above.

## 4.7 Marketing

Concerning mass production and sales, the company will allocate expertise to undergo specific marketing tactic and implement fundamental strategies as follows.



#### **4.7.1 Marketing Baseline Scheme for Construction Phase**

In the construction phase, the company focuses on the infrastructure work but the existing production line remains in full production and all products are sold by the company's distributors, to which the company implements rigid market supervision and management.

Given competitiveness, 10 provincial-level elite distributors (without expansion in 2 years) are being developed, each is bound by the lowest market margin of 5 million RMB and each must stipulate reasonable marketing and implementation plans that will be carried out under the company's permission.

The company shall, on its own, develop the businesses in 7 provinces, including Hubei, Hunan, Guangdong, Jiangsu, Zhejiang, Sichuan and Jiangxi. Therefore, the dealerships will be decided outside these 7 provinces.

The phasic objective of sales is 200 tons of the True Tiger Wine, for which each distributor assumes 20-ton sales. When meeting the production target, 60% of production will be subject to sales by the provincial-level distributors where each will assume 48-ton sales in average.

The market margins received by the company will be allocated as a working capital for business operations but not for construction purposes.

#### **4.7.2 Dealership Guidelines**

1. Payment before delivery.
2. The provincial-level distributors shall settle the consignment price based on 60% of the product market value and each distributor shall comply with the market price restriction.
3. The provincial-level distributors shall submit the market margin of 5 million RMB and above to refrain from market irregularities or criminal acts.
4. Compliance of agency and dealership regulations as well as agreements.

### 4.7.3 Internal Sales Policy

The company plans to cull out 7 economically favourable provinces of Hubei, Hunan, Guangdong, Jiangsu, Zhejiang, Sichuan and Jiangxi to set up independent offices. Each office will be injected with a start-up capital of 0.8 million RMB in order to achieve the sales of 40% production, whereas the other 60% will be allocated to 10 distributors chosen by the company.

Each office is allocated with 2 staff members for a regular salary of 2000 RMB per month. Based on market value sales, 2% of the sales volume are commissioned. However, the operation cost will be deducted from the commission.

### 4.7.4 Sales Volume and Sales Income Forecast

Table 4 Sales Volume and Sales Income Forecast

Item		1	2	3
Total	Volume (Ton)	200	650	800
	Amount (10,000 RMB)	26340	108696.4	133456
Self-sale	Volume (Ton)	0	263	320
	Amount (10,000 RMB)	0	57728.5	70240
	Commission (10,000 RMB)		1154.57	1404.8
Dealer Sale	Volume (Ton)	200	387	480
	Amount (10,000 RMB)	26340	50967.9	63216

## 4.8 Raw Materials and Energy Supplies

### 4.8.1 The Demand of Tiger Bones

According to relevant technical parameters, 160 kilograms of tiger bones may produce 3 tons of tiger bone stock. One kilogram of tiger bone wine contains 2~4 grams of tiger bone stock. Based on an average of 3 grams per kilogram, 800 tons of tiger bone wine require 2,400 kilograms of tiger bone stock, supplied by around 128 kilograms of tiger bones.

#### **4.8.2 Energy Demand**

According to current technical data of the production line, the energy and water consumption for the project is respectively as follows:

Energy consumption: 100KVA, while taking into account future development, the power distribution is based on the 250KVA layout design.

Water consumption: 100 tons of daily consumption.

## Chapter 5 Project Area and Construction Conditions Analyses

The proximity between the project and the Sanzhen's tiger incubation base provides convenience for the production and management, taking advantage of the cluster effect.

### 5.1 Physical Geography

#### 5.1.1 Geographical Location of the Project Area

The project area is situated 23 kilometres from Changsha City centre in Tiaoma Township, Changsha County, Changsha City, Hunan Province and connected east to Liuyang and west to Yiyang and Ningxiang; it is channelled north to Yueyang and Wuhan and south to Zhuzhou, Xiangtan and Guangzhou; it is easily accessible with 40 odd kilometres from Zhuzhou and Xiangtan. Its total area covers 400 acres.

#### 5.1.2 Meteorology and Hydrology

The project area is situated in the tropical wet climate zone of central Asia, featuring a climate of distinct seasons, moderate temperature, concentrated rainfall and temperate summers and winters. The yearly highest temperature is 39.0℃, the yearly lowest temperature is -7.5℃ and the yearly average temperature is 17.5℃; The annual precipitation is at an average of 1,695 mm and a minimum of 1,311 mm with the monsoon season being March-July; the annual average humidity is 87%; the annual sunshine hours are 1,500-1,600 hours; the annual frost-free days are 271.8 days; there is the Southwest prevailing wind in summer and Northeast in winter; the average wind speed over the past years is 1.4 m/s and the static wind frequency is around 40%. The perennial wind directions are mainly Easterly, Southerly and Northwesterly. The four seasons are distinct throughout the year, with a stronger regularity of summer changes.

#### 5.1.3 Parent Soil Material

The project area is situated in rolling terrain, which is prominently flat with 40-70m average altitude and 99.0m highest altitude. Among hills, there are pieces of farmlands and scattered hilly ponds forming a habitat of biodiversity. The

project area sits on the stabilised layers of the Eurasian Plate and non-seismic belt, without geological hazards. The overall geological conditions are rather good.

The parent soil material of the project area is the Quaternary Red Clay, which comprises of the pH value of 5-5.2, organic matter of 18g/kg, total nitrogen 1.1g/kg, available phosphorus 2.3 mg/kg, available potassium 84 mg/kg, heavy loam-light clay soil texture and 1.3-1.4 of soil mass. The soil is the typical South China acidic red soil that is deep and fertile without heavy metal pollution.

### **5.1.5 Vegetation**

The project area is in the northern vegetation sub-region of the broad-leaved evergreen forests, typically featured in the subtropical central Asia, subjecting to the central and eastern Hunan vegetation zone as well as the Chang-Zhu-Tan hilly vegetation zone. The Quaternary Red Clay is the major type of local soil. The vegetation is primarily shrubs. In the forests on the hills, there are mostly mature Masson pine forests, cedar forests, small areas of broad-leaved forests and undergrowth. Therefore, it is a suitable location for the manufacturing plant.

## Chapter 6 Environmental Protection, Labour Protection and Safe Production

### 6.1 Governing Laws and Regulations

《Code for Design of Occupational Safety and Hygiene in Electronics Industry》 (SJ3002-02), People's Republic of China

Provincial and municipal laws and regulations pertaining to environmental protection, labour protection and safety

### 6.2 Environmental Protection

#### 6.2.1 Industrial Wastewater

1. There is no industrial effluent.

1. The effluents of other water supply systems are in 6-8 of the pH value without pollutant and can be directly discharged.

#### 6.2.2 Noise

Newly built production lines are low in decibel noise levels. The crusher is installed in a separate workshop with enhanced sound-proof facilities and the doors and windows are sound-insulated. The outdoor precision air conditioning is noise ultra-resistant.

### 6.3 Labour Protection and Health and Safety

#### 6.3.1 Project Overview

The project is to build a new tiger bone wine factory where advanced technology equipment is employed and the manufacturing process output is free from hazards.

### **6.3.2 Construction and Site Layout**

The flat surface layout is reasonably arranged for safety isolation: The layout of respective distances between the manufacturing workshop and the wine liquid storage area, between the wine liquid storage area and the finished products warehouse and finally among the wine liquid storage area, finished products warehouse and the surroundings should be reasonably spaced.

The specific layout will be subjected to the Design Department after the land is confirmed.

### **6.3.3 Occupational Risk and Hazard Analysis of Manufacturing Process**

The manufacturing process of the project is highly automated with a few operational staff members. In the manufacturing process, there are not any toxic raw materials and materials. The manufacturing technologies at more advanced levels are used, thus safe to the environment and human bodies. Nevertheless, due to the main base liquor being the sorghum liquor with 52% of alcohol and the finished product being the tiger bone wine with 38% of alcohol, fire and explosion protection measures must be applied. In the case of machinery malfunction, it may result in alcohol leakage.

### **6.3.4 Primary Protection Measure in the Design of Occupational Safety and Hygiene**

In the on-the-job training, safe production education is vigorously emphasised.

In the technological design, the alcohol leakage prevention monitoring system, alert system and ventilation system are employed.

Each electrical device is equipped with a reliable earthing system and the power distribution system is equipped with a electric leakage protection system to ensure safe power consumption.

Within the factory and rooms, either heptafluoropropane or carbon dioxide gas distinguisher system is deployed; whereas, other buildings are equipped with portal fire distinguishers to provide firefighting safety.

All workers are issued with workwear, gloves and other work related apparatuses. Meanwhile, professional cleaners are employed in the manufacturing workshops, along with the precision air conditioning system, to meet the dust-free requirement.

All manufacturing workshops are equipped with the precision air conditioning and central ventilation system, thus securing a good environment for the technological production.

The factory adopts an Around View Monitoring System that is linked to the fire-fighting system to prevent accidents.



## Chapter 7 Investment Estimation

### 7.1 Estimation Conditions

1. Annual production is based on 10 working months, plus two months of production maintenance and staff's time-off.
2. Taking into account the existing production lines in the current project analysis, the future production will be subject to point of sale at production.
3. 8 working hours per day, 21 working days each month.
4. Electricity bill: 0.8 RMB/Unit; water bill: 1.58 RMB/Ton.
5. The breakage rate is approximately 0.15% based on the average price of 710 RMB/bottle and 1 RMB allocated to each bottle.
6. The warehouse is projected to be 5,000 square metres where a 0.5 RMB daily rent is charged for every square metre, thus less than 0.5 RMB is allocated to each bottle. The finished wine products are stacked in 6 tiers with 144 bottles per square metre so that 550,000 bottles of finished wine, at least, can be stored in the area of 5,000 square metres for a quarterly production volume.
7. This business operation under the special permit is subject to compensation fees of resources so as to cover all public relations maintenance; based on the high-end wine sales history, the management cost is relatively higher than conventional manufacturing businesses. By the projection of 3 RMB per bottle, the management expenditure of each production year reaches  $2,100,000 \times 3 = 6,300,000$  RMB.

### 7.2 Cost of Construction Works

1. New Manufacturing Plant: a construction area of 12,000 square metres costs 1000 RMB/Metre<sup>2</sup>, that is an investment of 12,000,000 RMB with a 30 year average depreciation rate.
2. Ancillaries, e.g. water and power supply facilities: 2,000,000 RMB with a 10 year average depreciation rate.
3. Survey and Design Services: 1,000,000 RMB.

4. Land Use Cost: 100 acres and 50 years of utilisation project to 200,000 RMB/Acre, amounting to an investment of 20,000,000 RMB.

Total: 35,000,000 RMB.

### **7.3 Equipment Investment**

1. 4 production lines, each worth 3,000,000 RMB, with an investment of 12,000,000 RMB for a 5 year average depreciation rate.

2. Tools and facilities: 3,000,000 RMB.

Total: 15,000,000 RMB (Maintenance cost is per 10% of facilities depreciation).

### **7.4 Market Development Cost**

#### **7.4.1 Office Establishment Cost**

Each investment equates a start-up capital of 800,000 RMB, with the total of 7 amounting to the sum of 5,600,000 RMB. Altogether, there are 14 staff members, each with an average minimum monthly salary of 2,000 RMB, that amounts to an annual payroll of 336,000 RMB.

#### **7.4.2 Advertising Cost**

Each bottle is projected for 10 RMB. Therefore, it is 5,250,000 RMB in the construction phase, 17,062,500 RMB in the second year of transition phase and 21,000,000 RMB in the post-production phase.

### **7.5 Management Cost**

According to organisational and business planning, there are 25 managerial members of staff. The annual average salary of each person is 60,000 RMB, totalling 1,500,000 RMB per annum; the annual average welfare expenditure of each person is 10,000 RMB, totalling 250,000 RMB per annum; the cost of social insurance and the like is a total of 100,000 RMB per annum. It makes an annual total of 1,850,000 RMB where approximately 1 RMB is allocated to each bottle of wine. As per regulation, the products shall be permit-labelled when leaving the factory and each label is charged by the state

at 0.5 RMB (i.e. animal protection compensation). Meanwhile, the company also expects overheads, business entertaining expenses and office facilities and furniture purchase. The cost of research and development is maintained at 1,200,000 RMB every year and correspondingly there is a budget for intellectual property rights. In sum, each bottle is projected to be 3 RMB in terms of assorted management cost.

## 7.6 Energy Consumption

Electricity: based on the design, the power consumption is 100 KVA; for 0.8 RMB per unit by the industrial power consumption average price, the daily power consumption is 100 KVA \* 10 Hours = 1 million units, i.e. 800,000 RMB per day, 16,800,000 RMB per month and 168,000,000 RMB per year. However, the cost is halved during the construction phase.

Water: the daily consumption is 100 tons where it is 1.58 RMB per ton, i.e. 158 RMB per day, 4740 RMB per month and 60,000 RMB per year.

## 7.7 Production and Material Cost Breakdown

Table 5 Production Cost Per Unit for Each Set of Product Amount: RMB

Product No. Cost Item	Jingpin Series			Haohua Series			
	J1	J2	J3	H1	H2	H3	H4
<b>Total</b>	<b>100.5</b>	<b>193</b>	<b>366</b>	<b>130.5</b>	<b>223</b>	<b>251</b>	<b>456</b>
<b>Raw Material</b>	<b>86.5</b>	<b>169</b>	<b>338</b>	<b>106.5</b>	<b>209</b>	<b>213</b>	<b>418</b>
Medicinal Materials	80	160	320	100	200	200	400
Sorghum Spirit	2.5	5	10	2.5	5	5	10
Container Bottle	4	4	8	4	4	8	8
<b>Packaging</b>	<b>10</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>10</b>	<b>30</b>	<b>30</b>
Payroll	1.5	1.5	3	1.5	1.5	3	3
<b>Logistics</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>
Warehousing	0.5	0.5	1	0.5	0.5	1	1
Transportation	0.5	0.5	1	0.5	0.5	1	1
<b>Wear and Tear</b>	<b>1.5</b>	<b>1.5</b>	<b>3</b>	<b>1.5</b>	<b>1.5</b>	<b>3</b>	<b>3</b>

To ease the calculation, all material items for the 80 ton monthly production, subsequent to meeting the production target, are listed below, with reference to the three year data of warehousing, transportation and wear and tear:

1<sup>st</sup> Year: 787,500 RMB

2<sup>nd</sup> Year: 2,559,400 RMB

3<sup>rd</sup> Year: 3,150,000 RMB

Table 6 80 Ton Monthly Production Cost Breakdown

Product No.		Jingpin Series			Haohua Series			
Cost Item		J1	J2	J3	H1	H2	H3	H4
<b>Monthly Production (1,000 Set)</b>		<b>4</b>	<b>5</b>	<b>0.5</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>0.5</b>
Raw Material	Unit Price (RMB)	86.5	169	338	106.5	209	213	418
	Cost (30,440,000 RMB)	346	845	169	426	836	213	209
Packaging	Unit Price (RMB)	10	20	20	20	10	30	30
	Cost (3,150,000 RMB)	40	100	10	80	40	30	15
Payroll	Unit Price (RMB)	1.5	1.5	3	1.5	1.5	3	3
	Cost (315,000 RMB)	6	7.5	1.5	6	6	3	1.5
Logistics	Unit Price (RMB)	1	1	2	1	1	2	2
	Cost (210,000 RMB)	4	5	1	4	4	2	1
Wear and Tear	Unit Price (RMB)	1.5	1.5	3	1.5	1.5	3	3
	Cost (315,000 RMB)	6	7.5	1.5	6	6	3	1.5

## 7.8 Working Capital

The total cost for the construction phase is approximately 0.2 billion RMB, considering smooth capital turnover where there are at least 10 turnovers a year and a minimum of 20,000,000 RMB working capital. Basically, it can be secured via the market margins of the distributors.

## 7.9 Total Investment

Table 7 Total Investment and Use of Funds

Project Use	Amount (10,000 RMB)
1. Construction Works	3500
Land Use	2000
Survey and Design	100
Construction	1200
Ancillaries	200
2. Production Equipment	1500
Production Line	1200
Ancillaries	300
3. Moving Capital	2000
4. Force Majeure	1000
Total	8000

## 7.10 Capital Requirement

From the analysis of the above chart, the company has a financing plan of 50,000,000 RMB to meet the requirements of construction works and production equipment whereas the moving capital can be secured through other routes, e.g. market margin collection.

## Chapter 8 Economic Benefit Analysis

### 8.1 Financial Analysis Foundation

1. Consumer Tax: 15% imposture
2. Business Tax: 5% imposture
3. Value-added Tax and Urban Maintenance and Construction Tax: 10% imposture of the turnover tax value
4. Loan Rate: 6.5% annual percentage rate
5. 33% accruals of income tax; 20% accruals of surplus reserves.
6. Irrespective of the fluctuation factors of cost and product price, the current price is the base.
7. In terms of sales volume, self sales is calculated by market price and agent sales by ex-works price. The ex-works price is 60% of the market price.

### 8.2 Three Year Sales and Income Forecast

In the one-year construction phase, there is only one production line for the volume of 200 tons that is entirely subject to agent sales. In the second year, i.e. starting from the 13<sup>th</sup> month, the production volume starts at 30 tons and, by 10-ton monthly increments, ends with a projected standard of 80-ton monthly production. This means, in the first half of the second year, the production capacity may reach 250 tons ( $30+40+50+60+70=250$  tons, in 5 effective production months) and the second half year goes up to 400 tons ( $5*80=400$  tons) totalling an annual production of 650 tons that represent a sales volume of 1,086,964,000 RMB, including self sales of 577,285,000 RMB, agent sales of 509,679,000 RMB and self sales commission of 11,545,700 RMB. It reaches the annual self sales of 320 tons (taking up 40%) with a sales volume of 702,400,000 RMB and a commissions amount of 14,048,000 RMB; and it reaches the annual agent sales of 480 tons (taking up 60%) with a sales volume of 632,160,000 RMB; the sum of both quantities of sales totals 800 tons, worth of 1,334,560,000 RMB.

Table 8 Second Year Production & Sales Plan

			First Half Year					Second Half Year
Production Volume (Ton)			30	40	50	60	70	400
Sales Volume (10,000 RMB)								
Production Cost (10,000 RMB)			1291	1722	2152	2582	3013	17215
including	Self Sales	Quantity (Ton)	10	20	20	25	28	160
		Sales Volume (10,000 RMB)	2195	4390	4390	5487.5	6146	35120
		Commissions (10,000 RMB)	41.9	87.8	87.8	109.75	122.92	702.4
	Agent Sales	Quantity (Ton)	20	20	30	35	42	240
		Sales Volume (10,000 RMB)	2634	2634	3951	4609.5	5531.4	31608

Self Sales Volume = 105360/0.6\*Self Sales Quantity/800

Agent Sales Volume = 105360\*Agent Sales Quantity/800

Based on the project construction plan and actual market demand in conjunction with the parallel operations of construction and production, the three-year sales income of the project product is summarised below:

Table 9 Types of Sales Income Summary Table

	Total	2006	2007	2008
	(10,000 RMB)	(10,000 RMB)	(10,000 RMB)	(10,000 RMB)
Total(10,000 RMB)	268492.5	26340	108696.5	133456
Hao Jinxing	19265.5	1890	7799.5	9576
Hua Yinxing	20182.8	1980	8170.8	10032
Series Hongxing	78284.8	7680	31692.8	38912
Lanxing	42812	4200	17332	21280
Jing Jinxing	13149.4	1290	5323.4	6536

Pin	Yingxing	67276	6600	27236	33440
Series	Hongxing	27522	2700	11142	13680

The sales cost includes sales staff wages, commissions and advertising fees.

First Year: The wine production is 200 tons, there are 2,100,000 bottles \* 200 tons / 800 tons = 525,000 bottles and the advertising cost is 5,250,000 RMB; the sales staff wages are 336,000 RMB; adding to a subtotal of 5,586,000 RMB.

Second Year: The wine production is 650 tons, there are 2,100,000 bottles \* 650 tons / 800 tons = 1,706,250 bottles and the advertising cost is 17,062,500 RMB; the sales commissions are 11,545,700 RMB and the wages are 336,000 RMB; adding to a subtotal of 28,944,200 RMB.

Third Year: The wine production reaches 800 tons, there are 2,100,000 bottles, the advertising cost is 21,000,000 RMB, the sales commissions are 14,048,000 RMB and the sales staff wages are 336,000 RMB; adding to a subtotal of 35,384,000 RMB.

The three-year sales cost is a total of 69,914,200 RMB.

### 8.3 Depreciation and Deferral

Table 10 Depreciation and Deferral Allocation Table Amount: 10,000 RMB

Item	Sum	Depreciable Life	1	2	3
Land	2000	50	40	40	40
Survey	100		100	0	0
Construction	1200	30	40	40	40
Ancillaries	500	5	100	100	100
Equipment	1200	5	240	240	240
Initial Expenditure	560		560	0	0



Subtotal		1080	420	420
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#### 8.4 Total Cost Summary

The cost estimates of each year within the three-year project are summarised in the below table (unit: 10,000 RMB):

Table 11 Total Cost Summary Table

No.	Name of Item	Total	2006	2007	2008	Year
1	Raw materials	62782.5	7610	24732.5	30440	
2	Energy cost	42015	8403	16806	16806	
3	Packing cost	6496.88	787.5	2559.38	3150	
4	Logistic cost	433.13	52.5	170.64	210	
5	Payroll cost	649.69	78.75	255.94	315	
6	Maintenance cost	70	10	30	30	
7	Wear and tear cost	649.69	78.75	255.94	315	
<b>8</b>	<b>Production Cost Subtotal</b>	<b>113096.9</b>	<b>17020.5</b>	<b>44810.4</b>	<b>51266</b>	
9	Management cost	1417.5	157.5	630	630	
10	Financial cost	975	325	325	325	
11	Sales cost	6991.42	558.6	2894.42	3538.4	
12	Depreciation cost	1920	1080	420	420	
<b>13</b>	<b>Total cost</b>	<b>124400.82</b>	<b>19141.6</b>	<b>49079.82</b>	<b>56179.4</b>	

It also includes:

Fixed cost	3337.5	1237.5	1050	1050
Variable cost	121063.32	17904.1	48029.82	55129.4
Operating cost	113096.9	17020.5	44810.4	51266

## 8.5 Sales Tax Forecast

For the following three years, the sales tax each year is summarised below in accordance with the sales income (unit: 10,000 RMB):

Table 12 Sales Tax Summary

	Total	2006	2007	2008
Sales income	268492.5	26340	108696.5	133456
Consumer tax	40273.88	3951	16304.48	20018.4
Business tax	13424.25	1317	5434.63	6672.62
Value-added tax	5369.8	526.8	2173.91	2669.10
Tax total	59067.93	5794.8	23913.02	29360.12

## 8.6 Financial Profitability Estimate

The financial profitability is estimated as follows: (unit: 10,000 RMB)

Table 13 Income Statement

Name of Item	Total	2006	2007	2008
Sales income	268492.5	26340	108696.5	133456
Sales tax	59067.93	5794.8	23913.02	29360.12
Total cost	124400.82	19141.6	49079.82	56179.4
Total profit	85023.75	1403.6	35703.66	47916.48
Income tax	28057.84	463.19	11782.21	15812.44
Net profit	56965.91	940.41	23921.45	32104.04
Surplus reserves	11393.18	188.08	4784.29	6420.81
Future profit	45572.73	752.33	19137.16	25683.23

## 8.7 Financial Index Estimate

### 8.7.1 Financial Internal Rate of Return, FIRR

$$\begin{aligned} \text{FIRR} &= \text{Net Profit (Income - Total Cost)} / \text{Total Cost} * 100\% \\ &= (268492.5 - 124400.82) / 124400.82 \\ &= 144091.68 / 124400.82 \\ &= 115.82\% \end{aligned}$$

### 8.7.2 Investment Payback Period

Investment Payback Period = Construction Period + Total Investment / (Average Annual Profit + Depreciation and Deferral<Maintenance>), i.e.:

$$\begin{aligned} \text{A、 Investment payback period before tax} &= 1 + 8000 / (28341 + 663) \\ &= 1 + 8000 / 29004 \\ &= 1 + 0.28 \\ &= 1.28 \text{ (Year)} \end{aligned}$$

$$\begin{aligned} \text{B、 Investment payback period after tax} &= 1 + 8000 / (18989 + 663) \\ &= 1 + 8000 / 19652 \\ &= 1 + 0.41 \\ &= 1.41 \text{ (Year)} \end{aligned}$$

### 8.7.3 Financial Net Present Value, FNPV (3 Year NPV)

Table 14 Discounted Cash Flow Table (Amount: 10,000 RMB)

Item	Year	2006	2007	2008
Cash Income		26,340	108,696.5	133,456

Sales Income	26,340	108,696.5	133,456
Cash Outflow	33,099.59	84,775.65	101,351.96
Construction Investment	5,000		
Working Capital	3,000		
Operating Cost	19,141.60	49,079.82	56,179.4
Sales Tax	5,794.8	23,913.02	29,360.12
Income Tax	463.19	11,782.21	15,812.44
Depreciation and Deferral	1,080	420	420
Net Cash Flow	-5,979.59	24,341.45	32,524.04
Discount Rate	0.12		
Discount Factor	0.8939	0.7972	0.7118
Present Value	-5,345.2	19,405	23,150.6
Net Present Value (3-Year Total)	37,210		

( IC=12% ) : 372,100,000 RMB.

#### 8.7.4 Return on Investment, ROI (After Tax)

$$\begin{aligned}
 \text{Average ROI} &= \text{Average Annual Total Profit} / \text{Total Investment} * 100\% \\
 &= 56966 / 3 / 8000 * 100\% \\
 &= 2.3736 * 100\% \\
 &= 237.36\%
 \end{aligned}$$

### **8.7.5 Profit and Tax Investment Ratio**

$$\begin{aligned}\text{Average Profit and Tax Investment Ratio} &= \text{Average Annual Total Profit and Tax} / \text{Total Investment} * 100\% \\ &= 85024/3/8000 * 100\% \\ &= 3.5427 * 100\% \\ &= 354.27\%\end{aligned}$$

### **8.7.6 Uncertainty Analysis**

$$\begin{aligned}\text{Break-even Point} &= \text{Fixed Cost} / (\text{Average Annual Sales Income} - \text{Average Annual Sales Tax} - \text{Average Annual Variable Cost}) * 100\% \\ &= 3337.5 / (268492.5 - 59067.93 - 121063.32) / 3 * 100\% \\ &= 3337.5 / 29453.75 * 100\% \\ &= 11.33\%\end{aligned}$$

Based on the analysis of the break-even point, when the average annual production capacity reaches 11.33% of the projected output, the project breaks even

### **8.8 Financial Forecast Conclusion**

To sum up the above analysis, upon the project execution, the sales income may reach 1,335,600,000 RMB by the production year (2008) and the total annual profit 479,200,000 RMB; the three-year average return on investment may reach 237.36%; the average annual profit and tax investment ratio may reach 354.27%; the financial net present value may account to 370,000,000 RMB; the before-tax investment payback period is 1.28 years and the after-tax one is 1.41 years.

**As per above indicators, the project is financially feasible.**

**In respect of the break-even analysis, the project risk resistance is strong.**

## Chapter 9 Social Benefit Analysis

### **9.1 Animal Protection through Development and Utilisation**

Our government has established a clear protection and development strategy for rare flora and fauna (please refer to: Animal Protection Notice No. 93 (2005)) and that is to: facilitate captive breeding of wildlife animals, relax the pressure of protecting wildlife resources and gradually replace wildlife resources so as to realise the strategy shift from the primary use of wildlife resources to making captive breeding the primary resources, resolve the dilemma between protection and utilisation and realise the synergetic development of wildlife animal protection and local social and economic developments. The True Tiger Wine provides a feasible path where the development of utilising the value of tiger carcass helps serve the protection purposes.

### **9.2 Humanistic Principle and Reasonable Use of Rare Animal Resources**

In the past, business operations of tiger carcass were prohibited, except specimen making, thus tiger bones were preserved by freezing, until the Chinese medicinal values were gone, and then destroyed so that the supposed contributions to human being were also vanished. After years of protection, China is now a relatively abundant resource area of tigers; with reference to the open protection model of African elephants, under the public's strong demand and the government administration's scientific policy, a protection model based on a humanistic principle has been decided so as to reasonably utilise the value of rare animal resources in order to benefit mankind and avoid the absolute protection model in the past that sacrificed and prevented reasonable benefits for human beings.

As proven by thousands of years of experience, tiger bone wine is especially efficacious for common diseases, like relieving rheumatism; it is evident that making medicinal wine from tiger bones, that have been accumulated decades-long, for the public is more beneficial to both tigers and human beings: the healthier the people, the more funds there are for tigers.

### **9.3 Promoting Regional Economic Growth**

After the project has entered into production, the annual sales volume is beyond 1.3 billion RMB where 0.29 billion is contributed to the state as sales tax and 0.16 billion as income tax. The taxation totalling 0.45 billion will make an overt contribution to the regional economic development.

In particular, the upstream and downstream industrial developments can be energised: the sorghum spirit in the upstream is secured with key accounts whilst the number of sales personnel or that of direct sales beneficiaries in the downstream will be tens of thousands of times more than the number of the True Tiger Wine production managerial staff.

In the process of building up the market system, the international market can be developed to make expected contributions to the P.R.C. growth of foreign exchange reserves.

There will be approximately more than 100 newly allocated manufacturing, technical and managerial job posts in the local community.

### **9.4 Traditional Medicinal Wine Brand Propagation, Establishment and Protection of Autonomous Intellectual Property Rights in the New Era**

As the first state-permit enterprise to run tiger bone wine business after the national reinstatement of tiger bone utilisation, it is a proud Hunan moment resulting from everyone's expectation. Carried with the reputation of the efficacious tiger bone wine over thousands of years, the True Tiger Wine distinguishes the traditional formula, reforms the conventional manufacturing technologies, establishes and protects the intellectual property rights of tiger bone wine under the conditions of modern industrialisation and mass production, pronounces the traditional Chinese medicine brand, reinstates the public's trust on traditional Chinese tiger bone medicinal wine and to a certain extent inspires the people's confidence.

This project is in line with the national policy of intellectual property rights for technological innovation and is an influential exemplar.

### **9.5 Flourishing Wine Culture, Prospering Gifts Market**

As the survey shows, more than 80% of tiger bone wine consumers believe in tiger bone wine and anticipate drinking it again. The True Tiger Wine makes everyone's dream come true for the wine is consumed and health is gained. Reflected by the current market, the True Tiger Wine is a precious gift, "a gift that presents health". The effect will not be exaggerated to alter the wine culture but it will certainly flourish the wine culture for the public.

### **9.6 Reducing Medical Expenses**

The social and economic benefits of the healthcare oriented True Tiger Wine are very pronounced. Statistically speaking, on the basis of large volume of chronic disease patients, e.g. rheumatics, the spectacular efficacy of the True Tiger Wine may substantially reduce the medical expenses and the reduction is far higher than the healthcare wine investment.

### **9.7 Comprehensive Evaluation Conclusion**

Overall, True Tiger Wine is produced with scientifically proven formula, technological maturity, advanced process, suitable market positioning, reasonable production capacity planning, adequate plant location as well as in environmental harmony and controllable risk that are beneficial to extending the value of tiger bones and beneficial to the development of tiger protection with great economic value and profound social benefits. The project is therefore feasible with great business operational and investment values. It is suggested that the capital be secured as soon as possible and the project planning and engineering be completed as early as possible for fully dedicated implementation.



## Chapter 10 Annex

10.1 Survey Report

10.2 《Hunan Sanzhen Tiger Incubation Base Establishment Feasibility Report》

10.3 Relevant state-issued official documents (referred to elsewhere)