

# THE DEVELOPMENT AND PROSPECT OF CHINESE GRASSLAND ECONOMIC SYSTEM

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## Abstract

China is a country with an old agriculture civilization of the world. The arrangement of the crop and pasture area had developed from Han and Tang dynasty. (From A.C 206.to AD 907). Chinese livestock economic had undergone the winding development for a thousand years of feudal society, however, It still belong to a phase of the loose private ownership. From 1949 when The People's Republic of China was founded, the pasture was nationalized and collective management. Since 1980s, the planned economic changed into the market economic gradually. The pasture was public ownership, but management by contract, paid utilization and unchanged a long term. This pattern was affirmed through legislation. The economic system at present caused the change of range management. It also combined the pasture managing and building with the farmer's gain. The results showed: The management by contract improved the livestock economic benefit, prevented the pasture degrade. It could result in the sustainable development of the livestock economic. This would be a deep revolution of Chinese range area in 21 century. It would not only benefit to the countries and areas around China, but also a new probing and contribution to the range management of the world.

**Keywords:** Social formation, Economic system, Sustainable development, Range management by contract, Range area

## Introduction

Eurasia prairie band is the biggest prairie in the world, including mainly mid-Mongolia steppe and Russian steppe. The prairie starts from the lower reaches of the Danube in Hungary, runs eastward along the Black River bank and enters Russia. Then it enters Mongolia through the north of the desert, and extends until the Songlia Plain, Inner Mongolia Plateau and the Loess Plateau in China. At the southwest of the Loess Plateau, the Tibet Plateau arises highly with distinctive high and cold pasture (Zhuyan, 1998). The pasture of China is the main part of Asian pasture, with a total area of 400 million hectares. Influenced by geographical position, topography and climate, Chinese pastures distributes as a band. From the north to the southwest, there are grassy marshland, typical grassland, desolate grassland, high and cold grassland successively. It is the most complex pasture in the world. In this area, there are scores of nationalities including Han, Mongolian, the Zangs and the Uygurs et at, with a population of over 100 million.

China has a history of more than 5,000 years, including many economic systems such as primitive and collective public ownership, loose private ownership (Zhang,1988; Tangqiye et al.,1985). Since Han and Tang dynasty, the pasturelands are always behind the cropland (Liujihao et al., 1988). After half a century's explore and practices, the economic system suitable to the pastureland's market economic and productive force level which based on family grassland and livestock contraction has comes into being. The economic system is not only a new exploration of utilizing grassland resources, but also a profound revolution of 21st China pastureland. It's a

reference not only to periphery countries, but also to world's grassland management science (Hong,1988).

### **History of chinese pastureland economic system**

The society forms of China include primitive society, slave society, feudal society and socialism society. Accordingly Chinese agriculture and livestock husbandry include primitive agri-husbandry, traditional agri-husbandry and modern agri-husbandry. The changes of productive forces and productive relations are the most important reason of social form's changes (Yan et al., 1992). Because of the multi-reasons of politic, economic, history and culture, the development of pastureland is always behind the cropland in the middle and east of China. The development was not balance even in the pastureland because of the difference of social glasses. For example, farmer-slave society had performed in Tibet area until 1949, but about 1000 years ago, feudal system had been put into practice in other pastureland (Nanjing Agricultural University, 1980).

#### *Primitive Public Owner Economic Stage*

In a strict sense, cropland and pastureland were not distinguished distinctly in primitive society. Man made a living by collecting and fishing, the productive force level was very low. The relations among people were maintained through clan system. There were no countries.

There were no surplus products. The land and resources were all public owned. The result of archaeology shows: from Yunnan province, Yuanmou apeman, 1,700,000 years ago---Lantian apeman, 850,000 years ago---Beijing apeman, 500,000 years ago--- the New Stone Stage, 10,000 years ago, to Xia-shang-zhou slave system, over 4000 years ago, the progress sustained about 2,000,000 years (Tang et al., 1985). The social system was primitive communism based on collective public owner during this period.

#### *Loose Private Stage*

##### *a) The Formation Of Chinese Agri-Husbandry Structure*

About 2000 B.C., Slave system took place of the primitive socialism system. Countries came into being. Classes exploit and private economic system began to appear (Liu, 1988). During the Spring and Autumn Period (about 450 B.C.), feudal system was put into practice in China.

After that, the dynasties appeared in China, including: Han, Tang, Song, Yuan, Ming, Qing, the Chinese Democracy Country and the eve of the People's Republic of China. During this long period, the basic social system was feudal society or semi feudal and colony society. The private system was the main economic system. At the initial stage of A.D., after Han and Tang dynasty's exploitation: planting is mainly in the middle and east, while nomadic livestock husbandry was mainly in the west (Zhang, 1989). After that, the pastureland came smaller and smaller, and the dividing line of cropland and pastureland had been keeping westward continuously.

##### *b) Characteristics of Chinese Private Economic System*

By the end of primitive society, private system began to appear. Both agriculture and livestock had reached a relatively high level. Wood and iron utensils were used widely. The improvement of productive forces accelerated the reform of productive relation. This propelled the society forward, but private system had been always the economic system of Chinese pastureland. During this long period, grasslands were owned by slaveholders or nobles. The sovereigns were the real owners and benefit from the pasture, while farmers were always exploited by them.

After the Opium War (1840~1842), China became a semi feudal and colony society. Although the capital economy was a great charge to the pastureland of old China, the social system did not change radically, it was still private economy in China. Of course, the private system appearing at fast represented advanced productive forces and productive relations, and it pushed forward the pastureland to develop. But by modern, influenced by industrial revolution and technology improvement, traditional agriculture came to be eliminated. The private economy which represents the minority became an obstruct of the society development. So, private system had to be taken place by an advancer society system. China entered socialism society from feudal society directly, without through capital society.

### *c) Stage Of Pasture Land Public Ownership*

In 1949, with the foundation of People's Republic of China, public owner economy system came into being. Chinese government held the "One Who Herds Ownes The Livestock" policy. That is to say, the livestock were distributed to the farmers. This made the pastureland were over grazed and grassland ecology was destroyed seriously. The population of pastureland increased rapidly. Nomadic system disappeared and herdsmen began to settle down. Theoretically, this time was the stage of forming primitive socialism with public economic system.

## **The executive economic system and sustainable development in chinese pasture zone**

### *Background and Character*

#### *a) Background*

After the middle of 70s, the political situation became stable. Chinese government took the economic construction as its key work. The planed economy began to be taken place of by the market economy. Under the condition of consolidated the state-owned economy and the collective economy, China encouraged the private economy to develop. At the beginning of 80s,China distributed the croplands to the farmers. At the same time, in pasturelands all of the livestock were owned by farmers, while the grassland was owned by government, respectively. To gain more profits, farmers pursued blindly the quantities of stocks. The pasture was overgrazed severely and because of farmers being unfit utilization, percent 80 of the pasture had been degenerated. During the time, the part pasture carried out the grassland and livestock contraction.

However, being short of related law and policy, the profit of the pasture kept declining and the grassland degenerated. According to experts' predict, it takes at least 10 years to recover the bad result.

Through about 10 years of exploit and practice, the grassland and livestock contraction

system, which is fit for the market economy in force and the productive forces level, was initially formed. The main ideas are that the grassland is public owned; the grassland can be contracted and used by payment; the contraction will not change in next long time.

a.1) *Features of the executive economic system in pastureland*

As a basic economic policy, the duty system of contracted responsibility to both grass and livestock has been determined which was suitable to Chinese condition. In fact, the policy was a undertaking during the reform of economic system in Chinese pastoral area. The pasturage belong to government and contract with compensation, so that the government can control the utilization and construction of pastoral resources in macroscopic, and national economy can develop healthily. The long-term unchanged contract let herdsman obtain the right of independent management, and be advantageous to pastoral development and sustainable utilization (Grassland Dept. Agriculture Ministry, 1998).

Practically, the duty system of contract to both grassland and livestock was a great emancipation and liberation of productive relation, it also was a qualitative leap in the change of production management from traditional pastoral husbandry. It readjusts the pasture and livestock as important productive materials reasonable. It results that farmers feed livestock based on the yield of the pasture. It straightens out the relation between the right of proprietary of pasture and the right of utilization. And stimulate farmer to combine the utilization, management and construction of pasture with duty, right and benefit of herdsman really. The new system of pastoral husbandry management system of investment, management and construction independently that based on family contract has been established and set up the model for the management and administration of public ownership pasture.

a.2) *The executive economic system and sustainable development in pastoral area*

The sustainable development is a key subject around the world and is strictly related to economic system. Different social system has different economic system. In capital society, pasture is a kind of productive materials, and a kind of commerce. The owner would utilize and construct scientifically so that the resource can be used longer. In China, pasture belongs to government and herdsman only has utilizing right. It means that the proprietary right of pasture and utilization right are separated. Under this situation, it is difficult to balance the relationship between livestock and pasture, so the pasture resources have been destroyed and wasted. No pasture resources means no sustainable development. Not change the pasture public system, China government implements creatively the system of contracted responsibility which pasture contracts with compensation, and it will be unchanged in 30 years. In a sense, there is a rent relation between the herdsman and government with guaranteed by law. The farmer can contract the grassland a long term. Combining of the proprietary right and utilization right in same time, the government supervise the utilization of grassland, and return over 90% contract expenses to herdsman for constructing grassland, ensure grassland can be used sustaining. Therefore, the executive economic system promotes and ensures sustainable development of husbandry in pasture zone.

a.3) *Grassland management and legislation*

In 1950s, the government of China had draw up Constitution and Land Law which had

even cleanly defined the rights and utilization of grassland.

The special legislation about grassland was drawn up in 1980s (the Department of Agriculture 1998). The National People's Congress (NPC) adopted the grassland law in 1985. After that, some grassland regulations were drawn up in more detail by provinces and autonomous regions which are in the pasture zone.

The drawing up and promulgating of the laws and regulations indicated the beginning of legal management of grassland.

At the beginning of the year 2000, the NPC replenished and revised the Grassland Law and regulations against the existing problems, and added the duty system of contracted responsibility to both grassland and livestock into the Grassland Law.

#### *a.4) Case analysis of current pastureland economic system*

The current economic system in Chinese pasture zone began at the early stage of 80s. It included two stages which experienced livestock contract and grassland -- livestock contract. It is reported that grassland had been contracted by herdsman over 85% in the whole country. Most herdsman signed a contract with the government.

Aloke, erqinqi is a typical livestock husbandry county in Inner Mongolia of China. In 1984, the grassland and livestock contract system was popularized throughout the county. Before contract, the proprietary rights of grassland were not clear, grasslands were over grazed, and began to degenerate. The efficiency of livestock husbandry was very low and the people's live was very poor. After the contract, the local government collected US\$424,000 from the herdsman, then it uses 93% of the money on fencing, sand controlling, well digging and grassland improving. In this way, the degeneration of grassland was contained, the vegetation of pastureland began to recovery, and the output value of livestock husbandry increased at a rate of 10% every year (Department of Grassland, Ministry of Agriculture, 1988). There is a family in this county with five persons, and the average capital income was less US\$120. In 1985, the family contracted 120 ha. grassland, and raised 320 sheep and 10 cattle, the net income was over US\$12,000 per year, the average capital income increased nearly 20 times. The family spent 30% of it's income in grassland construction, management equipment, fences, and dig 3 wells, then grazed in rotation and fed livestock in semi indoors. It also built high yield artificial grassland base about 30 hectares. After over ten years of development, the family owns US\$120,000 now.

### **The prospect of economic system development in chinese pasture zone.**

#### *a) A deep going revolution in china pasture zone in 21 century*

There are large area and long history to develop in chinese pasture zone but the production is low and the value per unit area is related to 1/80 as New Zealand, 1/20 as United State, even apparently lower than the surrounding area (Russia and Mongolia). The pasture zone occupies about half area of China but the animal productivity is lower than 20% of whole country because of low production manner, low management and techniques, traditional grazing system, and unreasonable economic construction which second and third industry are not developing. Related to eastern part of China, it is undeveloped. But China pasture zone is located at temperate grassland which climate is similar to the western region of United States, is advanced in location and resource and has great potential productivity as a meadow land. Chinese government pays more attention to western region development right now. It is planning to ensure to develop

economy rapidly by enlarging investment, proceduring policy and reasoning the industry construction in next 30 to 50 years. As the main crop, the China pasture zone is facing a good opportunity to develop in 21 century. The system of grassland and animal owner which is accepted reasonably will stimulate to reform the economic system. A deep going development revolution in Chinese pasture zone is coming.

b) *The trend of chinese pastureland livestock husbandry*

In the approaching 21st century, Chinese pastureland faces not only the great opportunity of developing the West region, but also the competing and challenging of foreign livestock husbandry after joining WTO. It's obvious that the traditional livestock husbandry can not fits the developing tendency of Chinese pastureland any more, pastureland livestock husbandry must transform from extensive to quality and efficiency. The family grassland and livestock contraction system is suitable to Chinese national conditions. It's sure to show great vitality in the near future. But along with the development of commodity economy, this family contraction system will be difficult to fit the strong competition of marketing economy, because this economy system is too scattered. Only by uniting the herdsman and intensive farming, can Chinese livestock husbandry be competitive in the world and make sustainable development in future.

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