

Developing green yak meat industries in Datong Yak Breeding Farm of Qinghai province

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Summary

Authors analyse the advantage of yak meat products by combining concrete method in yak producing in Datong Yak Breeding Farm and the situation of yak industries in Qinghai Province, The way of yak production and green yak meat industries has been put forwarded. It is suggested that cooperative organization of yak meat standard should be established as soon as possible, due to the situation of blank in grade appraising method and standards for yak meat in Qinghai-Tibetan plateau, it is necessary to make out a standard of complying with international practice and grade standards of yak meat production.

Keywords: Qinghai Province, yak, green yak meat, classified standard

Introduction

Yak is one of the important animal species in Qinghai-Tibetan plateau. There are more than 13 million yaks in China, accounting for 95% of the total yaks in the world. Under the conditions of special society, economy and natural ecological system, yak become the special animal species through long-terms natural selection and highly adaptation to ecological situation in Qinghai-Tibetan plateau. Yak is also a species which could not be substituted by other species. It is a main herders living material and income resources. Many research projects has been carried out in Datong Yak Breeding Farm by cooperating with Lanzhou Institute of Animal Science and Veterinary Pharmaceutics, Qinghai Academy of Animal Science and Veterinary Medicine, Agriculture and Animal Husbandry College of Qinghai University, the from change the meat and milk production originally into meat production. Due to the disadvantage of yak with slow growing and gaining weight, low productivity, long growing circle, moreover, there are not methods and standards which can appraise the yak meat, products both producers and consumers could not get consensus approval on the quality of yak meat. Due to disorder market, it is difficult to have good quality yak meat with good price. These are main constraint factors for yak industry development.

Brief introduction (Back ground)

Datong Yak Beeding Farm of Qinghai Province is located in the northeast of Datong county, it is only national ownership yak farm which mainly reproducing fine yak species in China. The main task is to study, experiment, breed, popularizing yak in Qinghai Province or China.

The geography and climate in Datong Yak Breeding Farm is unique, since non-pollution environment and natural grassland, yak meat have much advantage of high protein, low fat, high energy and nutrition, fine meat quality and good taste. It is famous for “natural green food” and has potential market prospect. In order to adapt to market economy and yak industry development, intensify effects of “green” and “fine brand”, the products of farm registered the brand of “Xiao Bai beef ”products. The yak farm has advanced equipment for processing yak meat, integrating producing, sales, supplying of yak meat. In 2003, there are 23 thousand livestock in yak farm, of which there are 19 thousand yaks. In this year, livestock column out are more than 6000 which include 2500 mature yaks, 3500 calves, annual beef output is 280t, calves beef output is 100t, total values of livestock production amounted to 7.1 million Yuan (RMB).

YAK PRODUCTION IN CENTRAL ASIAN HIGHLANDS**The advantage of yak meat products*****The “green” characteristic of yak meat products***

Qinghai-Tibetan plateau is famous for “world roof”, it is one of super non-pollution region acknowledged by UNESCO. Yak meat products is regarded as “green food” as a result of its grazing in natural grassland. Due to unique production environment and good quality of yak meat, it is famous for both home and abroad. Because of good understanding and increased consumption of “green food”, which will be good for yak meat production.

Yak meat with high protein, low fat, rich amino acid

Yak meat is one of the ideal food for human being (Song Haimei, 2002). It has rich nutrition and good quality with high protein (58.7% higher than cattle), low fat (69.8% lower than cattle), low energy (19.7% lower than cattle), rich amino acid (2 kinds of amino acid more than cattle). Many kinds of good-quality beef products can be produced.

Cost advantage of products

Cost of yak meat products is lower (Song Haimei., 2002). Because yak graze in natural grassland and low labour input. Moreover, less transfer of labour force and less substitute for farmers, so as to benefiting from abundant labour force, less cost of input, finally, advantage of production and price make yak meat products have strong competition in international market.

Situation of yak production and research Qinghai province***Yak production situation***

The yak production level is very low, because of yak mobile grazing system harsh environment condition climate in Qinghai Province. Total yak production region for 99% in Qinghai Province still adopt the way traditional, backward management system with over-milking of female yak, long production circle, disorder of livestock structure, lower proportion of female yak (only 30%), larger proportion of non-production yak, all these have influenced the column out rate and the merchandise rate.

Lacking of profound research in products development and processing, although a lot of research works have been done in yakology

A lot of research works have been done such as yak production, yak breeding and other basic research on yak, but because of poor research work in yak meat products developing and the suitable development of new products was influenced processing, rational developing and usage.

Constrained yak meat products circle because of lacking of the standards production system of yak meat

The standardization is an important mark for modern animal husbandry. It can protect the interests of producers and consumers. At present, the uniform appraising methods and standards has not been stipulated in China.

The key research projects in Datong Yak Breeding Farm in recent years***Mainly on yak and wild yak breeding***

The main task is pure breeding and introduce the wild yak blood to improve performance of domestic yak. There are about 1000 1/2 and 3/4 wild yak can be breed for each year, fifty thousand freezing sperms has been produced.

Implementing production of calves meat industry

The practices of all suckling and short term fattening project has been performed in our farm. Calves with 5-7 months reach average body weight of 77.6kg, its economic value equal to the 75% of mature yak (Feng Tinghua, 2001). The proportion of female yak increased by 60% in 2004 from 49% in 1992. There are 5610 calves have been slaughtered, annual average slaughtering number of calves are 4500, decreasing of death rate is 6% in winter. Annual output value reach 1 million Yuan (RMB), accounting for 1/5 of total output value of farms.

Popularizing and using standardization production technology

Shifting the animal production system from traditional, crude model to scale, standardization, regulation. In 2002, our farm products of yak meat and calve meat was approved to use harmless agricultural products marks. The farm has established the fame brand of yak meat as results of improving products qualities, monitoring system for yak meat quality has been established initially.

Developing of appraising yak meat

It is significant to stipulate the standard of classifying appraising of yak meat, which is key task for future research (Wang Shuling, 2003). By cooperating with other research institute, we are developing the research on appraising yak meat.

Development strategy for future***Establishing and developing breeding system***

Further establishing breeding and popularized system. On the basic male yaks records to establish the nucleus female herd with good heredity. Developing computer data management system for recording breeding data and registering the data of female yak reproduction, providing good-quality male yak species freezing sperms for market.

The standard demonstration of “green food” yak production farm should be established

In order to develop a product quality monitoring system, we need to improve production environments, input, production process, package, market admit, certification for transportation, slaughter management, safeguarding animals epidemic.

Implementing regulation of standardization production

According to the standard of national and agricultural products, a demonstration yak farm need to be established for producing organic yak meat.

Strengthening the understanding concept of green yak meat for staff

It will organize for training staff and farmers in producing green yak meat such as standardization knowledge, monitoring, quality management.

Implementing the strategy of integrating “pillar enterprise adds base for yak meat adds farmer”

Pillar enterprise plays an important role in producing and have influence for yak industry and other production enterprise. Shifting from extensive products producing to intensive product processing, from harmless food to green food.

YAK PRODUCTION IN CENTRAL ASIAN HIGHLANDS**Suggestion**

The system of yak meat classification and “fine yak meat deserving price” should be established. The standard of “Systematic appraising fine-quality cattle beef” has been enacted (Zhou Guanghong, 2001). But due to specific characteristic of yak meat, this national standard is not suitable practice producing. It is suggested to establish systematic appraising system for yak and cooperation organization of yak meat classifying appraising so as to complying with international practice.

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