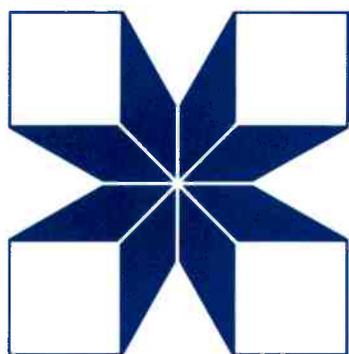


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C A N A D A

**SMALL RUMINANT  
PRODUCTION SYSTEMS  
NETWORK FOR ASIA**

PROCEEDINGS OF THE INAUGURAL  
MEETING AND LAUNCHING OF  
THE ASIAN SMALL RUMINANT  
INFORMATION CENTRE,  
KUALA LUMPUR, MALAYSIA,  
21-23 AUGUST 1989

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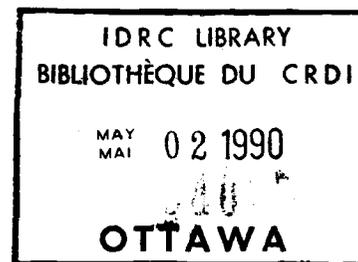
SMALL RUMINANT PRODUCTION SYSTEMS NETWORK FOR ASIA

Proceedings of the inaugural meeting and launching of  
the Asian Small Ruminant Information Centre,  
Kuala Lumpur, Malaysia, 21-23 August 1989

Editor:

C. Devendra  
Senior Program Officer  
Agriculture, Food and Nutrition Sciences Division  
International Development Research Centre

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## ABSTRACT

This publication presents the results of a meeting held in Kuala Lumpur, Malaysia, 21-23 August 1989, whose primary objective was to examine the formation of a network to support research and development activities for small ruminants in national agricultural systems and collaborative research programmes in Asia. There was consensus that a single network should be established for small ruminants in Asia whose name should be Small Ruminant Production Systems Network for Asia (SRUPNA). It was also agreed to establish a centralised information facility called Asian Small Ruminant Information Centre (ASRIC) to be based in the Central Sheep and Wool Research Institute (CSWRI) in Avikanagar, India. A three man Steering Committee was appointed to determine the location of the coordination unit to pursue the objectives, as well as future activities of SRUPNA and ASRIC.

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# THE PRESENT STATUS AND FUTURE OF SMALL RUMINANTS IN CHINA

An Min<sup>1</sup> and Xue Yufeng<sup>2</sup>

<sup>1</sup>Beijing Agricultural University, Beijing  
<sup>2</sup>Animal Husbandry Bureau, Ministry of Agriculture,  
People's Republic of China  
Beijing, China

## ABSTRACT

The paper traces the long history of sheep and goats in China, including the more recent introductions of fine woolled breeds, Rambouillets, Merinos and Corriedales and the development of the Chinese-fine wool sheep. It is estimated that the present population is 110 million sheep and 90 million goats, comprising 22 sheep and 20 goat breeds. The wool, meat, pelt and other products are described. Research priorities are listed.

## INTRODUCTION AND HISTORICAL ASPECTS

China was one of the earliest countries in sheep husbandry with records traced back to over 3,000 years ago. It was reported in ancient records that many sheep breeds were established as early as Tang Dynasty (618-907 AD) including Hexi, Hedong, Shayuan (now Tongyang sheep) and Manyang (now Tibetan) sheep. All these breeds produced outstanding wool for making carpets famous for their typical oriental style for the royal families, and the carpets were exported to Afghanistan and India.

Some of the sheep breeds such as the Huyang were for lamb skins. Both the Huyang sheep in Zhejiang and Jiangsu and Hanyang sheep in Central China area were very productive and prolific.

Sheep improvement by introducing foreign blood first started in 1914. Rambouillet Merino sheep imported from the USA and sheep farms were set up for the purpose of improving the local breeds in wool production.

More Rambouillets from U.S.A. were imported in 1920 to improve the local coarse wool sheep in Shanxi Province. Heavy losses of improved sheep occurred during the Japanese occupation but after the Second World War, UNRRA (United Nations Relief and Rehabilitation Administration) helped China to import several thousand Corriedale sheep, and breeding farms were established in Gansu, Zhejiang, Jiangsu and Shandong for crossing with the local breeds.

In 1934, Xinjiang imported a group of fine wool sheep from the USSR, such as Caucassian and Precoce Merinos. These breeds were placed in different areas of Xinjiang to cross with the local Kazakh and Mongolian sheep and this played an important role in the fine-wool sheep development. By 1943, the whole Xinjiang area had 28,000 crossbred sheep.

After the founding of the People's Republic of China (P.R.C.), more detailed work has been done on sheep breeding. In 1954, the Ministry of Agriculture announced the establishment of the first fine-wool sheep of China - Xinjiang Fine Wool Sheep. There were only about 50,000 sheep of the breed when it was first established. But by the end of 1988 the total population of Xinjiang Fine Wool Sheep reached over 10,000 head with 37,000 tonnes of fine wool production. And over 400,000 head of fine wool sheep were sold to other parts of the country for both breeding and production. Xinjiang Fine Wool sheep has the largest population among all fine wool breeds in China.

## **BREEDS**

In China, sheep are mainly distributed in the dry areas of the temperate and cold-temperate zones around 30° to 45° north latitude. Very little sheep can be found in the high humidity and high temperate areas.

As for goats, they are widely distributed in all parts of China and exceed the number of sheep more in the south than the north, in the coastal rather than in-land areas, and in the agricultural area rather than the animal husbandry area.

There are 42 sheep and goat breeds described in the **Sheep and Goats Breeds of China** (1989) comprising 22 sheep and 20 goat breeds.

The coarse wool sheep can be grouped into three types : Mongolian, Tibetan and Kazakh. According to their products, breeds can also be grouped as fine wool sheep, semi-fine wool sheep, carpet wool sheep, prolific type of sheep and pelt and lambskin type. Carpet wool sheep make up 40% of the total. Fine wool sheep, semi-fine wool sheep and other crossbred sheep also make up 40%. Prolific type sheep contribute 2% of the total sheep population, and include the Huyang, Small-tail Hanyang, and Big-tail Hanyang. Lambskin and pelt type sheep such as the Tanyang and Karakul also make up 2% of the total. The remainder would be meat and fat type, such as the Wujumqin and Altai Fat-Rumped sheep.

Out of the goat breeds, cashmere goats make up 48% of the total. Milk goats only 1.6%, pelt and kidskin type 1.5%, pen-brush type 1% and the rest would be hide/meat type.

Of the goat breeds, the most famous cashmere goats are Liaoning Cashmere Goat and Inner Mongolian Cashmere Goat, which are located mainly in Liaoning, Inner Mongolia and Gansu. As for the milk goats, there are Guanzhong Milk Goat, and Laoshan Milk Goat, which are located mainly in Shaanxi, Shandong and Hebei.

The famous prolific kidskin type goat is the Jining Grey Goat which is located in Jining and Heze area of Shandong Province as well as the adjacent provinces. Zhongwei goat is well known for its beautiful fur and is located in Ningxia and Gansu provinces. Pen-brush type goats are mainly located around the Taihu Lake in Jiangsu and Zhejiang provinces, while the best quality hides can be found in Sichuan, Henan, Anhui, and Hubei provinces.

## **SHEEP AND GOAT PRODUCTS**

According to the statistics at the end of 1988, China has a sheep population of over 110 million, and a goat population of over 90 million, totally 200 million. The mutton production 800,000 tonnes; wool production 220,000 tonnes including 110,000 tonnes of fine wool and 44,000 tonnes of semi-fine wool and other crossbred wool; cashmere production 4,000 tonnes and goat hair 14,000 tonnes.

### **Wool Production For Textile**

In order to meet the needs of the economic development of the country, steps were taken to introduce fine wool and semi-fine wool stud sheep as sires to cross with the local coarse wool sheep to improve the wool quality and to increase the wool production.

In the early 1950's, a large number of fine wool and semi-fine wool sheep were imported from USSR. From 1960's to 1980's long wool sheep, Corriedale sheep, and Merino rams were imported from England, New Zealand and Australia respectively.

The central government and the local governments made joint efforts to invest on the setting up of sheep studs in the main sheep growing areas to speed up sheep improvement through wide range of artificial insemination. Xinjiang and Inner Mongolia are the main fine-wool sheep producing areas. The production of fine wool and other crossbred wool in 1988 made up 34% and 26% respectively of the national wool production.

### **Cashmere Production**

Steps have been taken to make further selection of the breed and to cross with better breeds so as to improve the individual production and the quality of the cashmere. Inner Mongolia is the main cashmere producing area.

### **Carpet Wool Production**

Considerable efforts have been made to undertake breed selection and cross breeding to improve wool quality and individual wool production. The best carpet wool is produced in Xining and Hetian areas which provide the main raw material for "orient carpet". The annual production of various kinds of carpet is over 5,000 m<sup>2</sup>.

### **Fur and Lambskin/Kidskin Production**

The Huyang lambskin and the grey goat kidskin are well known for their water-wave-like curls. Those are the best type of lamb and kid skins for making lady's fur coat fashions famous for being light, beautiful and tasteful. The Tanyang sheep and Zhongwei goat produce the best quality Ermao Lambskin (30/60 days) characterised for being light, warm with fair curls, suitable for both men and ladies.

### **Sheep and Goat Pelt and Hide Production**

In recent years, there is a rapid development in sheep and goat pelt and hide production. The ready products and semi-finished

products of coats, boots, shoes, and shorn-pelt products are popular for both international and home market.

### **Meat Production**

Mutton has been the main meat product of sheep in China. Prime lamb production is on a limited scale, but will be encouraged through housing and feedlotting systems.

### **GENERAL POLICIES TO IMPROVE PRODUCTION**

The following strategies are suggested to further develop the sheep and goat industry and to improve product quality :

- 1) Develop the type and number of animals according to adaptation to local conditions by selection.
- 2) Expedite breed improvement through selection on recorded performance making full use of imported and local studs through artificial insemination.
- 3) Improve the distribution, commercial and marketing aspects of production.
- 4) Develop improved pastures on the grazing lambs.
- 5) Develop crop-livestock systems and especially the utilisation of crop residues.

### **RESEARCH PRIORITIES**

- 1) Study on production performance on following breeds :
  - Prolific sheep breeds : Huyang and Hanyang
  - Prolific goat breeds : Grey and Huai
  - Pelt breeds : Tanyang sheep and Zhongwei goat
  - Pen-brush breed : Haimen goat
- 2) Production systems for small ruminants especially from traditional systems to intensive systems and the integration of sheep and goats with cropping in the agricultural areas.
- 3) Breeding and selection for improving sheep and goat productivity and the quality of product. The application of advanced techniques to improve breeding.
- 4) Integration of feed supplies, pasture and crop residues, to meet the nutritional requirements and achieve maximum production.
- 5) Foreign aid programs to create research centres.

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