

## Grassland resource in Hebei province of China

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**Introduction** Hebei Province is located in the northern part of the North China Plain extending into the Inner Mongolian Plateau. Beijing, the capital of China, and Tianjin, the important trading port in north China, are all situated at the center of the province. The total area of the province is 190,000 km<sup>2</sup>, 26.3% of them are grassland which equals to 5 million hm<sup>2</sup>.

The province has a temperate continental monsoon climate, which varies greatly due to its vastness, and most of the territory has clear-cut seasons. Its annual sunshine time is 2400-3100 hours, annual frost-free period 120-200 days, annual precipitation 300-800 mm, and annual average temperature is from 0 centigrade to 13 centigrade.

**The distribution characteristics and types of Hebei grassland resources** According to the vegetation characteristics and the difference of distribution, grasslands of Hebei can be divided into 5 regional patterns. They are Bashang (highland) area, mountainous area of north Hebei, basin and mountainous area of north-west Hebei, mountainous area of west Hebei, Hebei plain terrain. The grasslands are classified into 6 types: temperate meadow-steppe type, temperate steppe type, lowland meadow type, high-cold meadow-steppe type, warm-temperate herbosa type, warm-temperate shrub herbs type.

### The forage yield and carrying capacity of Hebei's grassland

**Forage yield** Grassland in North West region (Zhangjiakou and Chengde) of Hebei with good hydro-thermal conditions and 5-7 months of growing period has the high forage yield in Hebei Province. According to the Hebei Provincial Grassland Management Station's monitoring data (2007), the forage plants ratoon easily and the grass coverage of the grassland is more than 65-75%. The height of the herbaceous layer is over 30-45 cm. The average yield of hay per unit per year is 1592.4 kg/hm<sup>2</sup> a, the output amounts to 5.93 million tons per year.

**Carrying capacity** The carrying capacity is 24.66 million Sheep equivalent units of the whole Hebei Province, nature grassland 48.5% and crops stalks 51.5% of that total.

**Utilization, conservation, improvement and construction** The positive efforts made by the Hebei People's Government for ecological improvement and biodiversity protection in the past five decades have acquired signal success. A number of eco-construction projects are initiated, such as reforestation, natural forest protection, Beijing-Tianjin sand-source control, natural grassland restoration and consummate more grassland family contracting system and etc. It execute that the pasture enclosure feeding, forbidding breed, building man-made grassland feed basement properly, pursue breeding in house or fold. Since 2000, planted or improved grassland has reached 833000 hm<sup>2</sup>. The grass industry and the husbandry in Hebei province are achieving gradual development, becoming more large-scaled and stronger.