

做好动物疫病防控 共建同一健康

Controlling Zoonotic Diseases Building One Health

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Yunnan Province overview

Geography of Yunnan Province

Yunnan is located between longitude 97°31'~106°11' east longitude and latitude 21°8'~29°15' north latitude. The total area is 394,100 square kilometers. It is bordered by Guangxi Zhuang Autonomous Region and Guizhou Province to the east, Jinsha River to the north and Sichuan Province across the river, and Tibet Autonomous Region to the northwest.

Yunnan is located in the combination of China, Southeast Asia and South Asia, with a total of 26 ports, including 20 first-class ports and 6 second-class ports, bordering Myanmar, Vietnam and Laos, with a national border length of 4,060 kilometers; it is connected with Thailand and Cambodia through the Lancang-Mekong River, and is one of the provinces with the most neighboring countries in China.



Administrative divisions, ethnicities and populations
Population & Ethnics

Yunnan Province administers 16 prefectures (cities) and 129 counties (cities, districts). Yunnan is the province with the largest ethnic diversity in China, with a total of 26 ethnic groups, of which 25 are ethnic minorities. The data of the seventh national census shows that the total population of the province is 47.209 million, of which the Han population is 31.573 million, accounting for 66.88% of the total population; the ethnic minority population is 15.636 million, accounting for 33.12% of the total population.

Animal and plant resources of Yunnan Province

Animals and Plants

The number of animal species in Yunnan is the highest in the country, known as the "animal kingdom". There are 1737 species of vertebrates, accounting for 58.9% of the country. Among them, 793 species of birds, accounting for 63.7%,; 300 species of mammals, accounting for 51.1%,; 366 species of fish, accounting for 45.7%,; 143 species of reptiles, accounting for 37.6%,; 102 species of amphibians, accounting for 46.4%. Of the 25,000 species of insects found on the national list, yunnan has more than 10,000 species. Yunnan is also the province with the largest number of plant species in the country and is known as the "plant kingdom".

Animal husbandry in Yunnan Province

Status of Animal Husbandry in Yunnan Province

In 2020, the total output value of animal husbandry in the province was 231.54 billion yuan, double that of the end of the "Twelfth Five-Year Plan", and the national ranking was raised from 12th to 5th, with 31.204 million pigs and 34.532 million pigs, ranking 4th in the country. There are 8.104 million beef cattle in the pen and 3.359 million heads in the pen, ranking 1st and 4th in the country respectively. There are 13.507 million meat sheep and 11.775 million out of the pen, ranking 8th in the country, and 190 million poultry and 340 million birds.

Animal disease prevention and control system

The province has basically formed an animal epidemic prevention system composed of three levels of veterinary administrative management, animal disease prevention and control, animal health supervision and law enforcement at the provincial, prefecture (city) and county (city, district) levels, as well as township (town), village and socialized organization animal epidemic prevention teams that are compatible with animal prevention work.

At present, there are more than 24,000 people engaged in animal disease prevention and control in the province, including 34 people at the provincial level, 340 people in prefectures and cities, 2,170 people in counties (cities and districts), 5,969 people in townships and 15,965 people in village epidemic prevention personnel.

In recent years, the province has continuously improved the socialization service mechanism for animal diseases, with leading enterprises and breeding professional cooperatives as the main body, and promoted the construction of a socialized service system for animal epidemic prevention. 447 animal epidemic prevention cooperatives have been established in 95 counties (cities, districts) in 15 prefectures (cities) in the province, with 2,860 employees and more than 70% of the counties and districts.

Animal epidemic emergency management system

Animal epidemic emergency response system

The Yunnan Provincial Party Committee and the Yunnan Provincial Government attach great importance to the prevention and control of major animal diseases and zoonotic diseases, and the provincial government has set up the Yunnan Provincial Headquarters for the Prevention and Control of Major Animal Diseases, which is headed by the provincial leaders and the responsible comrades of 18 departments at the provincial level, and the headquarters office is located in the Department of Agriculture and Rural Affairs of Yunnan Province, which is responsible for organizing and implementing the prevention and control of major animal diseases in the province.

16 prefectures (cities) and 129 counties (cities, districts) have set up headquarters accordingly, and the headquarters office is located in the agricultural and rural departments, which are responsible for organizing and implementing the prevention and control of major animal diseases within their jurisdictions.

All levels and departments of the province have fulfilled their responsibilities and worked together to jointly carry out animal disease risk early warning, epidemic investigation and disposal, etc., and the emergency management system operates efficiently and has become a powerful engine for animal disease prevention and control.

Animal disease prevention and control

Measures on animal disease prevention and control

According to the arrangements of the Ministry of Agriculture and Rural Affairs and the Yunnan Provincial Government, the agricultural and rural departments of Yunnan Province have conscientiously grasped the comprehensive prevention and control of major animal diseases and zoonotic diseases.

1. Major animal diseases vaccination

Every year, the Department of Agriculture and Rural Affairs of Yunnan Province issues the "Immunization Plan for Major Animal Diseases", the Yunnan Provincial Center for Animal Disease Prevention and Control issues the "Animal Disease Immunization Technology Program", and the population density of compulsory immunization for major animal diseases such as foot-and-mouth disease in the province is maintained at 100% all year round, and the pass rate of immune antibodies is maintained at more than 70% all year round, ensuring that the animal population is protected at any time.

2. Scientific implementation surveillance

The Department of Agriculture and Rural Affairs of Yunnan Province issued the "Monitoring Plan for Major Animal Diseases", and the provincial, municipal and county levels have carried out animal epidemic monitoring, covering the breeding links, market links and circulation links, and the annual monitoring volume of the province has reached more than 1.5 million copies, timely grasping the dynamics of the epidemic situation in the province. In addition, it also assists the market supervision department to carry out product monitoring and assists the forestry department to carry out wildlife monitoring.

Animal disease prevention and control

Measures on animal disease prevention and control

Third, actively carry out animal disease purification and disease-free community construction in breeding livestock and poultry farms

In order to grasp the prevention and control of animal diseases from the seed source and do a good job in the construction of net and disease-free communities in breeding livestock and poultry farms, the Department of Agriculture and Rural Affairs of Yunnan Province has set up a leading group, established an assessment expert database, and formulated and issued documents such as "Implementation Plan for Animal Disease Purification and Creation of Disease-free Communities" and "Technical Plan for Pseudo-rabies Purification of Breeding Pig Farms in Yunnan Province".

4. Supervision of the circulation of livestock and poultry and

Animal disease prevention and control

Measures on animal disease prevention and control

V. Improve the harmless treatment mechanism for sick and dead livestock and poultry

With the consent of the Yunnan Provincial Government, the Provincial Department of Agriculture and Rural Affairs and the Provincial Department of Finance jointly issued two documents, including the Work Plan for Further Strengthening the Harmless Treatment of Sick and Dead Livestock and Poultry in Yunnan Province and the Subsidies and Standards for the Harmless Treatment of Sick and Dead Livestock and Poultry in Yunnan Province, which improved the policy basis for the construction of the harmless treatment mechanism for sick and dead livestock and poultry. The harmless treatment of sick and dead livestock and poultry will be included in the extended performance management of major animal disease prevention and control, and the risk of disease transmission will be reduced through harmless disposal.

Sixth, strengthen the management of veterinary laboratories

The pathogenic microbiology laboratories in the province are included in the record management of the agricultural and rural departments of the province, and the laboratories in the province operate safely without risk accidents.

Animal disease prevention and control

Measures on animal disease prevention and control

Animal epidemic information report

In the event of a major animal epidemic, the provincial agricultural and rural department immediately reports to the Ministry of Agriculture and Rural Affairs and notifies the member units of the emergency system command. When zoonotic diseases are discovered, agricultural and rural areas and health departments inform each other and carry out prevention and control at the same time.

Enhance training and raise awareness

In 2021, the Department of Agriculture and Rural Affairs of Yunnan Province has held two special studies and issued documents to deploy the "Animal Epidemic Prevention Law" to publicize and implement the work. The province held 246 special training courses, posted 5,700 publicity wall charts, distributed 110,000 publicity brochures, trained 63,000 people, and used mobile phone APPS, websites and other media to publicize 2,100 times.

Good practices/successful cases

Schistosoma japonicum prevention and control in Japan

Schistosomiasis in Yunnan Province was first diagnosed in 1924, and was historically endemic in 18 counties in 4 prefectures and cities, and the epidemic of schistosomiasis in Japan has caused serious harm to the health and life of the people in the epidemic areas of the province. In 2006, the state further increased the prevention and control efforts, the central government invested in the implementation of comprehensive agricultural management projects, after 2015, no sick animals were found in the province, and in 2020, Yunnan Province passed the national assessment to meet the transmission blocking standards. The main measures are:

- (1) Strengthen leadership and increase funding input;
- (2) Captive or safe grazing of susceptible animals such as pigs, cattle, sheep, and equine animals, and avoid livestock contact with positive snails;



Good practices/successful cases

Schistosoma japonicum prevention and control in Japan

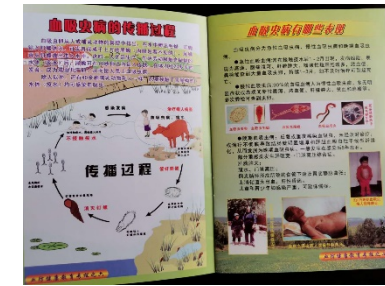
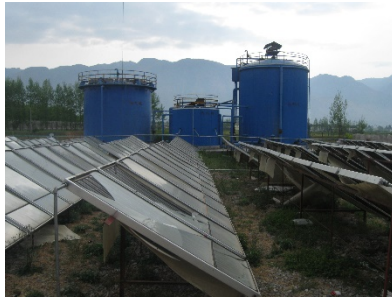
(3) Scientifically carry out epidemic disease monitoring, timely and standardized treatment of detected positive animals, and combat pathogens;

(4) Implement the hardening of ditches, the digging of fish ponds in low-lying areas for fish farming, the conversion of paddy fields to dry fields, the implementation of water and drought rotation in paddy fields, the transformation of the environment with snail breeding, and the reduction of the area of nail snails;

(5) Eliminate cultivated cattle, adjust the breeding structure, develop non-susceptible livestock and poultry, implement mechanized farming, and replace artificial planting;



- (6) Improve facilities for the harmless treatment of feces, standardize the handling of livestock manure, and ensure that the feces of sick animals do not pollute the environment and cause the spread of epidemic diseases;
- (7) Quarantine susceptible livestock entering and leaving endemic areas, and promptly remove the risk of transmission caused by positive animals;
- (8) Extensively carry out publicity and training on epidemic prevention and control knowledge in epidemic areas, and create a good atmosphere of close cooperation between the whole society and mass prevention and control.



A case study of success in recent years

Good practices/ successful cases

Equine infectious anemia prevention and control

Yunnan Province's horse infectious anemia was first diagnosed in 1955, in 2014, the province began to accelerate the elimination of the work, in 2018 passed the Ministry of Agriculture and Rural Affairs assessment to achieve the elimination standards, the main measures are:

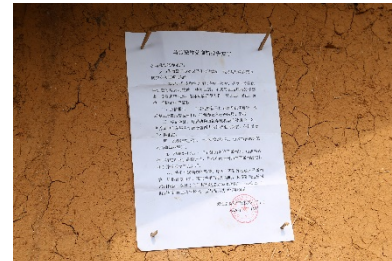
- (1) Strengthen leadership and increase funding input;
- (2) Carry out extensive investigations and promptly grasp the status of breeding equine animals, including agriculture and animal husbandry, economic products, sports competitions, and so forth;
- (3) Scientific sampling and monitoring based on risk factors, increase the frequency of sampling in key areas, and carry out multiple sampling inspections a year;



Good practices/successful cases

Equine infectious anemia prevention and control

- (4) Strengthen the quarantine supervision of circulating equine animals;
- (5) Uniform testing reagents, testing methods, and result determination throughout the province;
- (6) Promptly culling of detected positive horses, and subsidizing breeders at market prices;
- (7) Extensively carry out publicity and training on epidemic prevention and control knowledge, and create a good atmosphere for the whole society to cooperate closely and coordinate in disease prevention.



We have been working hard to build the same health
Building One Health We Keep trying
Thank you!
Thanks