

Present Situation and Thinking of Regional Management of Animal Diseases in China

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Abstract: In 1998, China started to set up animal disease free zones, and the demonstration zones was under construction in 2001. After fifteen years' practice, the regional management of animal diseases has achieved remarkable effects. However, there are also serious problems that restrict the long-term development. The concept of regional management of animal diseases should be innovative. Besides, it's necessary to promote the construction of China's animal disease free zones in line with international standards, and improve the ability and level of animal disease prevention and control. This article summarizes the present situation and achievements of the construction of epidemic-free areas and epidemic-free communities. Analyses on the related influences of three major power sources were conducted, which is national driving, local driving and industrial driving, on the promotion quality and speed of regional management of animal diseases. Regarding the problems existing in the regional management of animal diseases in terms of understanding, measures implementation and guarantee, this article puts forward some policy suggestions in order to provide reference for accelerating the regional management of animal diseases, such as making top-level design, strengthening government promotion, perfecting support policies and establishing long-term mechanism.

Keywords: Animal Disease Free Zones; Regionalization; Animal Diseases

Introduction

With the process of global economic integration, international trade and cross-regional circulation of animals and animal products are becoming more frequent, and the risk of occurrence and spread of major animal diseases is increasing. Once a major animal disease occurs, it impacts economy, and will be a great challenge to social public safety. Regional management of animal diseases is an important means to strength the power of prevention and control. As a starting point, this method, being an international common practice, can effectively control and eliminate animal diseases, and ensure the trade safety of animals and animal products. Regional manage-

ment of animal diseases is an internationally recognized measure which is conducive to controlling vital animal diseases, improving animal health and enhancing international trade of animals and their products. Regarding the vast territory, complex situation of animal epidemic, and obvious differences in animal husbandry development level among regions in China, it is of great significance to adopt regional management measures to prevent and control vital animal diseases.

1. Current situation of construction and regional management of animal diseases at home and abroad

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1.1 Current international situation

OIE Hygienic Code for Terrestrial Animals has established epidemic-free standards for more than 40 animal diseases, such as foot-and-mouth disease. The developed countries of animal husbandry such as Europe and America have used regional management measures to control and eliminate many severe and new animal diseases; Animal husbandry developing countries such as South America, South Africa and Southeast Asia have built epidemic-free areas of important animal diseases that affect domestic animal husbandry development and international trade, and achieved good social and economic benefits. Britain and Thailand have successfully eliminated major animal diseases such as avian influenza and swine fever in large-scale intensive livestock and poultry breeding enterprises and boosted the export of livestock and poultry and their products by implementing the construction of epidemic-free communities.

1.2 Current situation in China

In 1998, the Ministry of Agriculture invested in the construction of 19 animal disease-free areas in 23 provinces; In 2001, the construction of epidemic-free demonstration areas for animal diseases such as foot-and-mouth disease, swine fever, highly pathogenic avian influenza and Newcastle disease was carried out in 5 areas of 6 provinces (cities) including Songliao Plain, Liaodong Peninsula, Jiaodong Peninsula, Hainan Island and Sichuan Basin; In 2009, Conghua, Guangzhou, became the first non-epidemic area in China that passed the assessment and acceptance of the Ministry of Agriculture. Subsequently, Hainan Province, Liaoning Province, Yongji Jilin Province, Jiaodong Peninsula, highly pathogenic avian influenza and Jilin Province have also passed the assessment and acceptance of the Ministry of Agriculture. At present, nearly 20 provinces in China are actively planning and implementing the construction of epidemic-free areas. In addition, in 2016, Shandong Minhe and Fujian Shengnong broiler biosafety isolation zones passed the assessment and acceptance of the Ministry of Agriculture, and 36 enterprises including Shandong Fengxiang Group, Henan Huaying and Beijing Huadu Yukou are actively developing or exploring the construction of epidemic-free zones.

2. Problems in regional management of animal diseases in China

2.1 Lack of understanding of the significance of regional management of animal diseases and lack of medium and long-term planning

In the early stage of China's construction of demonstration areas without epidemic areas, areas with good animal husbandry foundation and large export volume were mainly selected for construction. For a long time, some local governments think that the main purpose of building an epidemic-free area is to export trade, but they have insufficient understanding of the role of regional management of animal diseases in controlling and eliminating major animal diseases. Some provinces and regions that implement regional management of animal diseases are only treated as project construction, without long-term plans and arrangements, lack of systematic planning and construction, and are difficult to implement in stages and steps. The built non-epidemic areas are difficult to meet the requirements of the technical specifications for regional management of animal diseases without regulations, and there is a big gap with OIE standards.

2.2 Policies to be improved and impetus to be further provided

National project support is not sustained. Since the project was started, the state lacked support and investment for construction projects and funds. Besides, there was no policy inclination, leading to weak promotion.

The market evaluation mechanism of animals and their products has not been established, and there is no requirement on whether animals and animal products come from non-epidemic areas and non-epidemic areas, and there is no discriminatory treatment, which is not conducive to the formation of a market mechanism with high quality and good price.

2.3 International recognition need to be improved

In terms of international certification, at present, no international certification has been carried out in the five districts and six provinces without epidemic areas built in China. OIE and our trading partners do not understand the achievements made in the construction, management and evaluation of epidemic-free areas in China, and

trade barriers caused by animal diseases still exist.

There is still a gap between China's risk assessment, prior approval, port entry, quarantine and other measures and the relevant provisions of OIE, and it is difficult for the construction of non-epidemic areas to meet the requirements of the technical specifications for regional management of animal diseases without regulations.

The related theoretical research in China is not enough, and there is a lack of reliable epidemiological analysis and scientific regionalization. At present, the research on regional management of animal diseases in China mainly focuses on qualitative research, while the research on related concepts, international regulations and regional management mechanism of animal diseases in China is the mainstream. There are few related quantitative studies, only Li Yuanyuan and Pu Hua have carried out a few studies such as economic and social benefit evaluation on the construction of China's unregulated animal epidemic areas. Research on risk assessment and management model is less, which is also related to the low level of informationization of grass-roots animal epidemic prevention system in China, and the sensitive and difficult to obtain data related to animal diseases.

2.4 Single mode of regional management, and under-developed management technical measures

At present, in the regional management standards recommended by OIE, there are both regional zoning mode and biosafety isolation zone mode. At present, China mainly adopts a single immune-free area construction mode. Although Shandong Dezhou Liuhe Group is preparing to build a biosafety isolation zone, it has not been formally incorporated into the construction of a national biosafety isolation zone demonstration zone. In some places, the regional management measures for animal diseases are not well recognized, and it is difficult to provide effective evidence to prove that there is no epidemic by emphasizing infrastructure construction and neglecting monitoring and supervision. Some places think that as long as some instruments and equipment are put into infrastructure construction, an epidemic-free area can be built, and there is no scientific evidence to show whether the area is truly epidemic-free.

3. Countermeasures regarding re-

gional management of animal diseases in China

3.1 Strengthen organizational leadership, and establish as well as improve safeguard measures

Governments at all levels should attach great importance to the prevention and control of animal diseases in the development of animal husbandry, increasing farmers' income and food safety. The veterinary administrative department, as the competent department of regional management of animal diseases, should strengthen organization and leadership, formulate and improve various regulations, systems and standards according to local conditions, and provide institutional guarantee for regional management of animal diseases; Give full play to the role of overall planning and coordination, integrate superior resources, promote the joint prevention and linkage of various departments, and provide organizational guarantee for the regional management of animal diseases; Strengthen the construction of grass-roots animal epidemic prevention system, further enhance the working ability and professional level of veterinary medical institutions, and ensure that all measures of regional management of animal diseases can be effectively implemented. Regionalized management of animal epidemic diseases is a long-term and complex project. Only by establishing measures related to health and safety can we better promote the stable and healthy development of regional management of animal epidemic diseases in China.

All localities should establish a long-term mechanism for regional management of animal diseases and increase policy support for animal disease demonstration areas without regulations; Furthermore, it is necessary to establish a stable national fund input mechanism, do a good job in supporting management of central and local financial input, actively mobilize social funds to participate in the construction of regional management of animal diseases, and coordinate the dynamic mechanism and long-term mechanism of financial input and social association investment, so as to provide capital and safeguard obstacles for regional management of animal diseases.

3.2 Improve support policies and establish a long-term mechanism

Firstly, it is necessary to optimize the market access system, to promote the implementation of the market access system for animals and animal products circulation in non-epidemic areas and non-epidemic areas. By implementing differentiated treatment, a fairer market environment with high quality and good price can be built.

Secondly, establish a reward system to reward and commend the assessed non-epidemic areas, or areas that are carrying out regional management of animal diseases; Optimize the performance evaluation mechanism and increase the weight ratio of evaluation elements in non-epidemic areas.

Thirdly, to award to the county with pregnant pigs whose number is above the average; to give subsidies for improved varieties of pigs, establishment of standardized demonstration farms for livestock and poultry breeding and other projects, and strive for relevant preferential policies or subsidies. Promote the livestock and poultry products in non-epidemic areas directly linked to the “three products and one standard” of the competent department, and take the construction of non-epidemic areas as the prerequisite or equivalent condition for the production of pollution-free livestock and poultry products.

3.3 Carry out national assessment of animal epidemic areas without regulations, and promote the international recognition of animal epidemic areas without regulations in a timely manner

In accordance with the requirements of the Law on Animal Epidemic Prevention, areas with no prescribed animal epidemic diseases shall meet the standards set by the veterinary administrative department under the State Council, and shall be announced upon acceptance by the veterinary administrative department under the State Council. On the one hand, we can summarize the achievements made in the construction of unregulated animal epidemic areas in China, find out the existing problems and improve the management measures of unregulated animal epidemic areas; On the other hand, it is also a necessary step to apply for international recogni-

tion of animal health status in areas without specified animal diseases. At the same time, according to the requirements of international rules, we should strive for the international recognition of the construction of China’s non-regulated animal epidemic areas, publicize the achievements of China’s non-regulated animal epidemic areas, and promote the international trade of animals and animal products in non-regulated animal epidemic areas.

4. Conclusion

To sum up, animal husbandry has become an important part of China’s agricultural economy after more than 30 years of reform and opening up. Animal disease is an important factor to restrict the healthy development of animal husbandry. Regional management of animal diseases is an internationally recognized important animal health measure. Implementing regional management of animal diseases and gradually building non-regulated animal disease areas are animal disease prevention and control measures suitable for China’s national conditions. Although there are serious constraints in the development process, it is necessary to create the concept of regional management of animal diseases, promote the construction of non-regulated animal disease areas in line with international standards, and enhance the ability and level of prevention and control of animal diseases in China. Besides, the international competitiveness of animals and animal products, along with their quality and safety, should be improved in China.

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