

Research on the Optimization and Improvement Path of Straw Comprehensive Utilization Mode under the Perspective of "Order Agriculture"

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Abstract

20 report proposed "accelerate the reform of ecological civilization system, the construction of beautiful China" development strategy this project will target the present situation of straw burning and comprehensive utilization, to the comprehensive utilization of straw in Anhui province, field visits, interviews to understand the rural straw using status and "lai jia biological technology co., LTD." straw recycling technology, to understand the existing comprehensive utilization of straw mode. In view of the existing problems of straw utilization in Anhui Province, the innovative mode of green comprehensive treatment of straw comprehensive utilization and the innovative mode of straw stacking are proposed, and the actual benefits of the operation of this mode are analyzed in Bengbu. Finally, the comprehensive and effective utilization of straw is put forward from the perspective of the government and enterprises. Under the guidance of the rural revitalization strategy, it has far-reaching practical significance and research value to reasonably improve the agricultural development mode, develop and apply the agricultural green ecological technology, and promote the comprehensive utilization of crop straw.

Keywords

Ecological Technology Straw Utilization; Economic Benefits; Regional Economies.

1. Introduction

The 20th report puts forward the development strategy of "accelerating the reform of the ecological civilization system and building a beautiful China". As is known to all, man and nature mutually influence and restrict each other, and it is our responsibility to respect, adapt to and protect nature. Lucid waters and lush mountains are mountains of gold and silver, and protecting the ecological environment means protecting the productive forces. In order to solve environmental problems, we must change the development mode, economic structure and consumption mode, and pay close attention to the key areas of environmental protection, key issues and the weak links in environmental governance. The improper treatment of straw is an urgent problem to be solved at present. After harvesting the crops, farmers directly burn the straw in the field, producing a large number of sulfur dioxide, nitrogen dioxide and other pollutants, resulting in smoke to lock the road, inducing a series of environmental problems. When the government repeatedly banned straw burning, farmers poured straw into the river, causing serious pollution of the river. General Secretary Xi Jinping has stressed that the development of ecological progress will benefit both the present and future generations. We must firmly establish a socialist view of ecological civilization, promote the formation of a new pattern of harmonious development between man and nature, and make efforts to protect the ecological environment. Therefore, under the guidance of the rural revitalization strategy, it has far-reaching practical significance and research value to reasonably improve the agricultural

development mode, develop and apply agricultural green ecological technology, and promote the comprehensive utilization of crop straw.

2. Research Meaning

2.1. Realistic Meaning

Theoretical significance: Straw incineration produces serious atmospheric environment and global environmental problems. The research on this project is conducive to the development of green economy. So far, domestic and foreign scholars have focused on the estimation of pollutant emissions generated by burning straw burning, the determination of pollutant emission factors, and the analysis of spatial and temporal distribution characteristics of emissions. This topic of the present situation of comprehensive utilization of straw in Anhui province, through field visits, face to face interview form to obtain certain data, and empirical analysis, on the basis of the predecessors of straw, using present situation and pollutant discharge results and countermeasures, put forward reasonable Suggestions for the comprehensive utilization of straw mode, for clear the direction of the development and utilization of straw, realize the comprehensive utilization of crop straw virtuous cycle of significance, boost the benign development of green investment[1].

2.2. Theoretical Significance

Practical significance: In recent years, although China has made remarkable achievements in the comprehensive utilization of straw resources, there are still problems such as low energy utilization rate of straw, unreasonable layout of recycling industry and short processing industry chain. Improving the comprehensive utilization rate of straw has the following significance: effectively alleviating the employment pressure of farmers, improving the effect of targeted poverty alleviation, and increasing the income of farmers; using the straw green recycling industry as the carrier to promote agricultural industrialization and promote the development of regional economy; contribute to the income of local township finance; greatly accelerate the pace of township industrialization, and inject strong vitality into the prosperous development of rural economy.

3. Research Objectives and Main Contents

3.1. Research Objectives

China is a large agricultural country with huge straw resources, with an average annual output of about 865 million t and a resource utilization rate of 81.68%. On March 8, 2021, the National Development and Reform Commission issued the Guiding Opinions on the Comprehensive Utilization of Bulk Solid Waste during the 14th Five-Year Plan period, which proposed: "Vigorously promote the comprehensive utilization of straw and promote the comprehensive utilization of straw industry to improve the quality and efficiency". With the adjustment of national rural industrial structure and the improvement of residents' living conditions, regional, seasonal and structural surplus in straw production, resulting in the occurrence of a large number of straw piling or centralized burning. This not only seriously pollutes the environment, but also causes a lot of waste of resources. Through the types of straw in Anhui province, using the present situation and pollutant discharge results and countermeasures, for straw comprehensive utilization of rationalization Suggestions, therefore, improve the efficiency of comprehensive utilization of straw resources, the environmental quality improvement and economic and social development comprehensive green transformation, to the existing model development of innovation, with straw green circulation industry as the carrier, summarizes the relief of farmers' employment pressure, improve the precise effect of poverty alleviation, promote farmers' income, promote the development of regional economy of the main benefits.

3.2. Primary Coverage

The straw resources in China are mainly used by fertilizer, the utilization rate is 53.93%, supplemented by feed and fuel, the utilization rate is 23.42% and 14.27% respectively, the utilization rate of base and raw materials is low, 4.89% and 3.40% respectively. With the adjustment of national rural industrial structure and the improvement of residents' living conditions, regional, seasonal and structural surplus in straw production, resulting in the occurrence of a large number of straw piling or centralized burning. This not only seriously pollutes the environment, but also causes a lot of waste of resources. The yield of crop straw in China is huge. In order to improve the utilization efficiency of straw resources, it is necessary to increase the research and development of the core and key technologies of straw "five modernization" (straw fertilizer, straw feed, straw energy, straw base material and straw raw material), so as to improve the comprehensive utilization efficiency. Promote the development of straw to the direction of fertilizer, feed, fuel, base material and raw materials, and realize the comprehensive utilization mode of "market user demand orientation, continuous guarantee of raw material supply, compound efficient utilization of agriculture and industry, and significant improvement of comprehensive benefits".

3.3. Innovation

1) The project from the perspective of two villagers and enterprises, using reasonable investigation method, through the field investigation, visiting discussion, literature review research, the straw returning machinery production enterprises, straw using high value enterprises and the current policies and regulations, understand the comprehensive utilization of straw and current policy in Jiangsu province. As well as the mathematical modeling methods to conduct research, farmers, industry, the market have a better grasp.

2) Crop straw is a kind of renewable resource that "uses and discard causes harm". Promoting its comprehensive utilization is of great significance to increase farmers' income, environmental protection, resource conservation and sustainable development of agriculture. At present, the comprehensive utilization of straw mainly focuses on fertilizer, fuel, feed, raw material and base material, It is expected that these five aspects will also be the main development direction in a long time in the future, In order to achieve the purpose of achieving the straw utilization methods basically in line with the requirements of modernization and the complete elimination of straw burning methods, In the analysis of the nutrient composition, resource quantity and distribution of crop straw in China, And on the basis of the current comprehensive utilization situation, This paper summarizes the technical characteristics and application status of the "five modernization" comprehensive utilization of straw in China, Analyzed the development focus and mode of the comprehensive utilization approach of straw, Put forward the countermeasures and suggestions to promote the comprehensive utilization of straw, The future development direction of comprehensive utilization of straw is discussed[3].

4. Literature Review

1) In recent years, experts and scholars are committed to promoting the level of agricultural machinery and equipment, but also make continuous innovation on the utilization value of crops. For example, the mechanism of big data to analyze the distribution of crop straw in China, and the different comprehensive treatment of straw according to different characteristics of different regions have achieved remarkable results, including straw returning to the field, fuel, feed, etc. Among them, straw returning to the field has a good effect in making full use of straw nutrients and increasing soil moisture. The author plans to discuss its sustainable development on the basis of the current crop comprehensive utilization technology.

2) At present, it has been clear that the "five utilization" of straw fertilizer, feed, matrix, energy and base material, which should be adjusted according to local conditions, but at present, there is a lack of unified planning and guidance for the "five utilization" of straw in various places, resulting in poor comprehensive utilization of straw[2]. The government lacks a unified medium and long-term plan for the direct return of straw to the field. The mechanical corn harvesting equipment cannot meet the requirements of direct return to the field, and the second operation increases the cost, and the blind return to the field also leads to the poor effect of return, and farmers do not recognize the technology of straw returning to the field. So the comprehensive utilization of straw science and technology innovation, guide to encourage straw using enterprises and scientific research institutions to carry out various forms of production, study, research enterprise cooperation, promote the organic combination of science and technology development and achievements transformation, speed up the transformation of scientific and technological achievements, and improve the level of science and technology support, strengthen policy and support, the government of the comprehensive utilization of straw scientific planning and guidance, strive to build the industrialization of straw system to explore, and combining the problems existing in the popularization and application put forward relevant policies and Suggestions.

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