

The Changes in the Contribution of Scientific & Technological Progress of China's Alfalfa Industry During the 13th Five-Year Plan Period & the Prospect of the 14th Five-Year Plan Period

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The alfalfa industry is of far-reaching significance for ensuring the supply of high-quality forage and promoting the high-quality development of the dairy industry. It is an important industry related to national food safety. In order to explore the changes in the contribution of scientific and technological progress of China's alfalfa industry during the 13th Five-Year Plan period, this research is based on the microdata of alfalfa production tracked and investigated by the Industrial Economic Research Office of the National Forage Industry Technology System from 2015 to 2020, and with the help of stochastic frontier analysis model, the spatial and temporal change characteristics of the technical efficiency of alfalfa production are analyzed, and the rate of technological progress and the contribution rate of scientific and technological progress are calculated. The research results show that during the 13th Five-Year Plan period, narrow sense technology progress rate of China's alfalfa industry was 5.72%, and the contribution rate of narrow sense technology progress was 52.50%. Technological progress has become the main driving force for the growth of the alfalfa industry. The average production technology efficiency is 0.8751. Factors such as the length of education, the amount of machinery owned by alfalfa producers and whether the production process suffers from natural disasters, have a significant impact on the technical efficiency of alfalfa production. In view of the research conclusions, policy suggestions such as focusing on promoting the research and development and cultivation of improved varieties of alfalfa; steadily improving the production and processing capacity of alfalfa products; strengthening the training of grassroots professionals, and improving technology popularization are put forward. Combined with the current production practice and development trend, it is expected that the 14th Five-Year Plan and the coming period are important strategic opportunities for the development of China's alfalfa industry, and the development of China's alfalfa industry will reach a new level.

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