"Gheorghe Asachi" Technical University of Iasi, Romania

PERFORMANCE EVALUATION MODEL OF AGRICULTURAL ECOLOGICAL GOVERNANCE UNDER RESOURCE ENVIRONMENT DUAL CONSTRAINTS

Yao Chen[1], Zhao Xiaoqing[2]*

[1]Library of Jiangsu Ocean University, Lianyungang，China 222000
[2]School of Literature and Law, Jiangsu Ocean University，Lianyungang，China 222000

Abstract

Appropriate evaluation of agroecological governance performance can effectively improve the development of agriculture, enhance the ability to resist risks, and put forward the performance evaluation model of agroecological governance under the dual constraints of resources and environment. Firstly, the relationship between resource development and ecological environment is analyzed, the development characteristics of resource and environment coupling are pointed out, the evaluation index system of resource and environment coupling development is established, and the evaluation model of resource and environment coupling development degree is constructed. On this basis, the weight vector of agroecological governance performance evaluation was calculated, the comprehensive evaluation load matrix was established, the fuzzy index evaluation structure was constructed, and the sustainable evaluation index was used to construct the agroecological governance performance evaluation model. The experimental results show that the sensitivity of agricultural ecological governance performance is very sensitive to changes, and the sensitivity is the smallest in 2017, with a sensitivity value of 1.77; The sensitivity is the highest in 2021, with a sensitivity value of 3.16. The output value of agriculture and animal husbandry accounts for a large proportion, and the proportion will remain at around 35%-55% in 2021. This proves that the established model has certain application value to the performance evaluation of agricultural ecological governance measures, can effectively evaluate the performance of agricultural ecological governance, and provide strong support for relevant departments to formulate agricultural policies and promote agricultural sustainable development.

Key words: coupling of resources and environment, evaluation index system, fuzzy index, sensitivity

Received: August, 2023; Revised final: November, 2023; Accepted: December, 2023

---

* Author to whom all correspondence should be addressed: e-mail: 2015000007@jou.edu.cn