OPTIMIZATION OF INCENTIVE CONTRACTS LEADING ENTERPRISES TO PARTICIPATE IN LOW-CARBON AGRICULTURAL DEVELOPMENT

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Abstract

Based on principal-agent model, this paper tries to solve the asymmetric information problem between the investor and agriculture leading enterprises. A mathematical model of the incentive contract is designed, on the basis of which it is investigated the design of the incentive contract under different risk preference, the change of the income when implementing the incentive contract and the changing trends of the contractors' costs when an observable variable is included in the incentive contract. The results show that the agency costs borne by agricultural leading enterprises are positively correlated with risk appetite and external uncertainty factors, incentive cost, risk cost as well as the total agency cost of the agriculture leading enterprises are lower when contract invest more on low carbon technology. Finally, the conclusions are verified by numerical simulation.

Keywords: agriculture leading enterprise, asymmetric information, incentive contract, low carbon production

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