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基于CGE模型的极端冰雪灾害经济损失评估(PDF)

Title: Assessment of economic losses of extreme ice/snow disasters based on CGE model

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摘要: 结合极端冰雪灾害的特点及传导途径,构建了极端冰雪灾害经济损失综合评估的总体框架,并以湖南省可计算一般均衡模型(HNUGE)为基础,通过在传统模块的基础上增加农业损失传导模块、电力业损失传导模块和交通业损失传导模块等三项冰雪灾害传导模块,实现了对传统HNUGE的拓展和改进,构建了更具针对性的极端冰雪灾害经济损失综合评估的可计算一般均衡模型。该模型能够更科学地估计极端冰雪灾害造成的综合损失,通过对2008年湖南冰雪灾害进行实证分析,发现模型运算结果与实际情况基本一致,验证了该模型的实用性和可行性。

Abstract: According to the characteristics and conducting pathways of extreme ice/snow disasters, this paper built a general framework for comprehensively assessing the economic losses of extreme ice/snow disasters. This study improved the traditional HNUGE model by ddding agriculture losses conduction module, power losses conduction module, and transportation losses conduction module to it, and built a more targeted CGE model for comprehensive assessment of economic losses of extreme ice/snow disasters. The built model can estimate the comprehensive losses of extreme ice/snow disasters more scientifically. An empirical analysis of the ice/snow disasters in Hunan Province in 2008 show that the results are consistent with the actual situation. So this built model is strongly practical and feasible.

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