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[Abstract Title]

Estimation of business interruption loss of industrial sectors in China based on multi-regional CGE model-A case study of typhoon Lekima

[Abstract]

Flood disaster is one of the natural disasters that cause serious economic losses in the world. With the increase of extreme rainfall frequency under global climate change and the aggravation of population and enterprise brought by the acceleration of urbanization, the economic loss caused by flood disaster is increasing. According to the statistics of the National Disaster Reduction Center of China over the years, the direct economic losses of flood disasters reported by provinces from 2000 to 2017 have amounted to 3000.405 billion RMB. The official data mainly focus on statistics of direct economic loss assessment in China. However, with the influence of industrial cooperation and regional coordinated development, the industrial spillover effect caused by industrial relations within the economic system are more and more obvious. The estimation of business interruption loss is still underestimated and neglected at present. This research takes Lekima typhoon which occurred on August 10, 2019 as an example, evaluates the business interruption loss of industrial sectors in China. Taking the most affected region, Zhejiang Province as trigger area, this study evaluates the indirect business interruption loss of multi-provinces by employing multi-regional CGE model with the official direct economic loss data in the flood-affected area, and multi-regions I-O tables of



China. This research can be useful for government to identify vulnerable industrial sectors, to make policies to guide local economy recovery.

[Keywords]

business interruption loss, multi-provinces, CGE, typhoon Lekima, China