Disaster Adaptation Mechanism and Disaster Prevention Adaptation Planning Strategies for Industrial Parks in Response to Climate Change and Different Socio-Economic Disasters

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Abstract : The impact of climate change has intensified in recent years, causing Taiwan to face higher frequency and serious natural disasters. Therefore, it is imperative for industrial parks manufacturers to promote adaptation policies in response to climate change. On the other hand, with the rise of the international anti-terrorism situation, once a terrorist attack occurs, it will attract domestic and international media attention, especially the strategic and economic status of the science park. Thus, it is necessary to formulate adaptation and mitigation strategies under climate change and social economic disasters. After reviewed the literature about climate change, urban disaster prevention, vulnerability assessment, and risk communication, the study selected 62 industrial parks compiled by the Industrial Bureau of the Ministry of Economic Affairs of Taiwan as the research object. This study explored the vulnerability and disaster prevention and disaster relief functional assessment of these industrial parks facing of natural and socio-economic disasters. Furthermore, this study explored planned adaptation of industrial parks management section and autonomous adaptation of corporate institutions in the park. The conclusion of this study is that Taiwan industrial parks with a higher vulnerability to natural and socio-economic disasters should employ positive adaptive behaviours.

Keywords: adaptive behaviours, analytic network process, vulnerability, industrial parks

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