

# The basic study for green flood control and mitigation under climate change

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## Abstract

The rise of Industrial Revolution in the 18th century has accelerated the development of human culture. On the other hand, the rapid modernization has also caused a lot of problems, such as energy resources consumption, ozone depletion, polar glacier melting, animal and plant extinction, sea level rising, and pollution, etc. These things lead to global warming and climate changes, and result in serious ecological crisis. From Kyoto Protocol in 1997 to Copenhagen Accord in 2009, the trend of eco-consciousness is increasing significantly, hoping that ecological disasters can be reduced and prevented. However, for the time being, there is still lacking a mutual understanding among researchers on the definition of eco-consciousness in reducing disasters and preventing floods, and this obstructs the development of disaster prevention programs. This research thus conducts a thorough literature review and uses inductive method to define the meanings of “green flood control” and “disaster mitigation.” After generalizing a comprehensive structure of the three aspects, a green flood control and mitigation evaluation model can be constructed using a scientific method, and the goal for flood control and disaster mitigation can be set properly. The results can be a basis for both the central and local governments in devising relevant strategies and for allocating resources properly. As a result, floods and disasters can be reduced substantially, and life and property losses can be decrease consequently. A better living environment can be obtained, and the goal of green world and sustainable development can be achieved.

Keyword : Global Warming; Climate change; Inductive method; Green; Flood control; Mitigation.