



Review of Natural Disaster Loss Index System and Construction of Indexes for Catastrophic Marine Disasters in China

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Developing intact and reasonable loss index system for natural disasters is of great importance for rapid loss assessment, emergency assistance and post-disaster reconstruction. This study first introduced the status of the loss statistics of natural hazards worldwide. Next we listed the operational natural disaster standards and loss index systems released by the 7 governance departments in China, which include Ministry of Civil Affairs, Ministry of Land and Resources, Office of State Flood Control and Drought Relief Headquarters, Ministry of Agriculture, Seismological Bureau, Meteorological Bureau, and State Oceanic Administration. Then, the indexes from the above systems were compared. Three kinds of relationships were defined: same indexes, similar indexes and included indexes. It can be found that Ministry of Civil Affairs has the most complete indexes system for all kinds of natural disasters. At present, with the lack of the standards focusing on catastrophic marine disasters, the statistical system for severe marine hazards was established based on the four principles: 1) No conflicts and repetitions compared with the indexes and standards we already have. 2) Easy to implement. 3) Fully consider the severe hazards potentially happened in the future. 4) The indexes should be well-rounded and intact.