

Development of socio-technical disaster model

ABSTRACT

Using a grounded theory approach, six public inquiry reports were utilized to identify the phases associated with the development of socio-technical disasters. Despite the differences of disasters involved and their technologies, the disasters were found to exhibit common features and characteristics. The findings demonstrated that socio-technical disasters are not sudden cataclysmic events but they evolved in phases with long developmental period. A model of the sequential development of socio-technical disaster is proposed as consisting of ten phases namely operation, incubation, forewarning, activation, onset, rescue and recovery, inquiry and reporting, feedback, social justice, and social and legislation reform. This model reaffirms and advances developmental theory of disasters.

Keyword: Socio-technical disaster; Incubation; Inquiry; Rescue; Response