## **Abstract**

• Natural disasters often result in fatalities, injuries, diseases and other negative physical and mental health effects. Indirectly, disasters can result in social grievances and resource scarcities which can trigger social conflicts. Despite the many natural disaster studies, however, little attention has been devoted to the study of conflicts following a natural disaster. Through a systematic literature review from 1986 to 2013, this paper examines social conflicts resulting from natural disasters. In this paper, a three-dimensional analysis, Description-Theme-Mechanism, is used to combine and analyze the current state of research, with the ultimate goal of clarifying the concept of social conflicts arising from natural disasters, summarizing existing research on the links between natural disasters and social conflicts, determining any significant rules and trends, and providing recommendations and directions for future research.

## Introduction

- Natural disasters are catastrophic events with atmospheric, geological, and hydrological origins (e.g., droughts, earthquakes, floods, hurricanes, landslides) that can cause fatalities, property damage and social environmental disruption [1]. After a severe natural disaster, roads, communication and power sources are often damaged, so there are immediate localized resource shortages, and disordered and chaotic economic, political and social environments [2]. Natural disasters have been previously related to consequent social conflicts and a further entrenchment of existing poverty levels and inequalities [3], [4]. In this study, we adopted a classic definition for social conflict; a controversial interaction among social actors to realize scarce or incompatible aims and prevent the opponent from attaining them [5]. Social conflicts have existed since the beginning of human society and have exerted a significant influence on social evolution [6]. Conflict theory holds that conflicts are a basic state in society, and can function to encourage social integration and improve and/or stabilize social order [7].
- In disaster research, there has been significantly more emphasis placed on disaster impact, risk management, and post-disaster recovery and reconstruction than on the social consequences arising from the disaster [8]. Sorokin [1] first identified the polarizing effects of disasters in his work "Man and Society in Calamity" [1], and Cuny [9] noted that natural disasters can act as triggers for social structural change [9]. Natural disasters can also cause political unrest [10] and some studies have explored how the occurrence of natural disasters can significantly increase the risk of violent civil conflict in both the short and medium term [11], [12], [8]. Some investigations into the causal relationship between natural disasters and conflict have been undertaken [3], [4], [13], [14]. In addition, some research has examined the conflict-inducing consequences of climate change, causing a heated debate in academic and open communities [15], [16], [17], [18], [19]. Despite this wide body of research, however, there has been a lack of systematic evaluative studies on the correlation between natural disasters and disaster-based conflicts. In this study, we discuss and analyze the mechanism behind natural disaster caused social conflict through a systematic literature review. The goals of this study are as follows: (1)

- to analyze and summarize the significant rules and trends from previous studies into natural disasters and social conflict explore the mechanisms connecting natural disasters and social conflict; (3) to provide recommendations and directions for future research.
- Beck believed that today's society is constantly changing from industrial society to the risk-based society [20]. Risk society is a transformation of society from industrial to post-industrial [21]. The main feature of risk society is filled with uncertainties and conflicts in economy, politics, environment [20]. As Beck first proposed the notion of the risk society in 1986 and the research for this paper commenced in 2014, this study used this time frame (1986–2013) to build a literature database from the Web of Science Core Collection and Google Scholar based on the Emergency Events Database (EM-DAT), a global database on natural and technological disasters. For a natural disaster to be entered into the database, at least one of the following criteria must be met: (1) 10 or more people have been reported as killed; (2) 100 or more people have been reported as affected; (3) there has been a declaration of a state of emergency; (4) there has been a call for international assistance. Using knowledge management software, we analyzed the literature database and summarized the significant relationships between natural disasters and social co
- The remainder of this paper is organized as follows. Section 2 presents the systematic literature review method used for the combing and analysis of research from a global perspective. Section 3 presents the literature analysis results. In this section, we identify the past and present research foci and give guidance as to possible avenues for future research. Some related special themes and mechanisms are discussed in detail and the relationships between those themes and achievements are analyzed. In Section 4, some findings and recommendations for future research are given. Finally, Section 5 concludes the study with a summary of the research and findings.