

Role of Social Networks in Community's Flood Risk Perception and Mitigation Behavior: A Case Study from Mumbai, India

○Subhajyoti SAMADDAR, Hirokazu TATANO

It is evident that adoption of innovative household preparedness measures or practice is inevitable for improved disaster risk preparedness and management. If more and more individuals or households adopt the prescribed disaster preparedness measures, example raising plinth level and store drinking water and foods during monsoon season to reduce flood risks, the resiliency capacity of the community will improve. But recommended disaster preventive actions or measures are new to the community, they do not know the advantages and disadvantages of the new technology, therefore, the decision to adopt is an uncertain issue. Researchers and scholars have shown that in the process of adopting preventive action, individuals go through two different phases or stage before they take adoption decision. These two stages are risk appraisal and coping appraisal. Risk appraisal is a process in which an individual assess a risk possibility and damage potential to things he or she values, assuming no changes in his or her own behavior. If an individual believes the hazard can adversely affect him or her, individual will look forward to find out possible options, actions and measures to reduce and mitigate the risks. The fear engendered by perceptions of risks cause people to assess to possible coping strategies. This process is called coping appraisal. Many individual as well as societal components influence coping and risk appraisal processes, which are important for the adoption of prevention action or measure. Many researchers have argued that social networks or human

networks play an important role in this process. The social network approach argues that it is the relational aspects of individuals and the resulting networks and self organization systems that influence individual perceptions and build groups of like minded individuals. These social units, it is argued, behave as attitude, knowledge or behavioral structures. The idea of social contagion is that individuals adopt the attitudes or behaviors of others in the social network with whom they communicate. These studies and other suggest that individual perceptions are influenced by the perceptions of individuals in their social, or friendship network. However, there are very few empirical studies which have examine how social networks influence risk perception and coping capacity of individuals and households. This study examine how the structure, nature and quality of social networks influence households' risk perception and risk appraisal process which ultimately affect their preventive action adoption behavior. The study has been tested and examined in flood prone micro-hotspots of Mumbai city which is prone to flood and other natural hazards. In this regard, it is import to note that more that 1000 people were died, 30000 building collapsed in 2005 flood and moreover the slum population, which covers 60% population of the Mumbai city population, were most severely affected by this flood. A Field method of the study includes face to face structure and semi-structure interview, observation etc.