

FLASH FLOOD IN MOUNTAINOUS AREAS; SPECIAL REFERENCE NALANDA OYA CATCHMENT.

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Abstract

Rainfall in Sri Lanka is very heavy, as it is located in the tropical zone of the Earth. Due to the heavy rain, people have to face many natural disasters mainly flood. At present, Physical and human environment has been damaged due to flash flood. It has caused a huge impact. The main objective of the study is to explore the factors that affected in rapid flash flooding in the mountain areas in Sri Lanka. The study area of this research is Nalanda Oya catchment in Matale District. This study based on primary and secondary data. Questioners, observation and semi structured interviews have been used as collect primary data. Also secondary data collected using institutional data, research papers, articles, internet and books. The collected data was analyzed using both qualitative and quantitative methods; and quantitative data was presented under simple statistical analysis to using “Ms Excel” software. Also descriptive method uses to analyze qualitative data. Also scientific data were analyzed using geographical information system. According to the study it was prove that, there are many physical and Socio-economic factors affected to improve the flash flood in mountain areas. Especially temporal changes of rainfall pattern and relief features are caused to recurring flash flood. Also socio-economic activities like encroaching reservation, failures of construction road and bridges, invasion of invasive plant and sand mining in river bed are helped to improve flash flood. Therefore, the research suggestion is should be taken action for unauthorized encroaching, failures of development, minimize the sand mining and controlling invasive species. Also create a successful Community Preparedness mechanism and successful community pre-preparedness plan related to flash flood.

Keywords : Mountain Area, Flash Flood, Physical Factors, Human Factors