

## To Establish an Interactional Real-Time Debris-Flow Disaster Information System and Promotion

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Due to the diverse terrains and climate changes on over-developing regions in recent years, lots of disasters have been transformed from single disaster into complex disasters, whose influenced regions and environment changes are much larger than previous one. Because of these reasons above, the importance of disaster prevention and reduction have been marked on present situation.

As the progressive and widespread of information techniques, the efficiency of disaster relief and its application have been elevated through combining instant disaster information. Recently, government has spread lots of important disaster information through internet delivery, however, those information which are too professional or complicated are not suitable for public people. Besides most of information are one-way delivery from government to public people, and this way does not consist of public participation and crowd-sourcing mechanism concept. In this study, a cross-platform instant disaster prevention information network has been successfully established under multiple attribute framework, including disaster prevention and early warning smart phone application platform, validation system based on crowd sourcing concept and internet community information platform. In addition, this application not only has instant official information from government, but also includes disaster information from public people on different platforms, as the result, this kind of framework can suitable for different using behaviors of people.

Through providing instant official news information, clear disaster relief information, visualization presentation of disaster information map, and instant informed pipeline system, this study has established a complete and suitable disaster prevention network for public people requirements to speed up and improve the efficiency of disaster prevention and relief.

**Keywords:** Disaster Prevention and Relief Information, Crowd-sourcing, Disaster Prevention and Relief Information Platform