

Development of a method for the evaluation of total damage caused by landslide disasters

Landslide disaster is commonly evaluated with only direct damage, e.g., restoration and compensation expenses of properties and infrastructure, although indirect and long term damage on local communities such as social isolation should never be neglected. To mitigate direct and indirect damages by landslide disaster, it needs effective measures against the estimated damage by the disasters. This project gets the reality of various damages caused by landslides, and proposes a method to evaluate total damage, particularly shedding light on their social impact.

In 2008, direct and indirect damages caused by landslide were estimated in some cases. As a result, in spite of little direct damage by a landslide, the road closure was considered to have caused significant economical loss. Total monetary loss caused by the road closure be estimated concerning extra traveling time and cost occurred by detouring, traffic volume and the number of tourists. Meanwhile, the damage which was hard to measure by monetary value was found that estimated as total damage with use of public attention based on the area of newspapers.

Regarding the effective measures to mitigate damage caused by landslide, hearing investigation was carried out to know the effect by judgment of expert in landslide. The result shows that it has the effect to mitigate damage by technical expertness and reliability based on abundant experience, and position as second opinion.

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