**Mapping The Potential Risk Of Landslides**

**in Ciamis Regency, West Java.**

A.B.Suriadi M Arsjad

Geospatial Information Agency.

Jl. Raya Jakarta Bogor Km. 46, Cibinong,

budiman6109@gmail.com

**Abstract**

This paper is a part of the results of the research on Potential Disaster related to Extremes Climate Variability on The south part of West Java. There are at least five natural disasters related to extreme climate such as floods , landslides, storm, extreme waves , and long droughts . However in this paper the discussion focused on landslides in terms of both the causes as well as the potential risks it caused. The results of this study are geospatial information or maps about landslide. Those maps are: Map of Landslide Prone, Map of people's Vulnerability to Landslide Hazard, Map of the Capacity of residents facing disasters, as well as Map of the Risk Potential of Landslides. To produce these thematic maps is needed some layers of data. These layers is derived from geospatial data as well as statistical data, such as SRTM DEM, Landsat imagery, topographic maps, and statistical data on population density, the availability of infrastructure for disaster mitigation, awareness of people facing disaster or people’s preparedness for natural disaster that may be happen etc. The method used is the application of GIS and remote sensing . Landsat imagery used for interpretation of land use . SRTM DEM is used to calculate and mapping slope steepness. SRTM DEM combined with Landsat imagery has used for interpretation of land forms . Slope class , land use class , and landform classes were scored and used as a parameter in the making of landslide hazard maps. Statistical data are mapped on the basis of villages boundary. Each one were scored according to its probable influence to disaster risk. Nearly 50 % of the Ciamis Regency prone to landslides . Based on Landslide Risk index maps that made, approximately 30% of the Ciamis Regency located in areas with high risk until very high risk.

**Keywords** : extreme climate , extreme weather , landslides , GIS , risk index , vulnerability , capacity , spatial data