ABSTRAK

A tsunami disaster can be interpreted as a disaster that can damage the area near the coast and its surroundings. The disaster has a very high destructive power. This research focuses on evacuation routes, hazard level planning, and prevention of tsunami impacts effectively and efficiently. In this study, researchers analyzed the coastal area of South Garut. It has great potential for a tsunami disaster because the South Garut coast is very close to the meeting between the Indonesian-Australian plate and the Sunda Megathrust Strait. If frictions occur between the plates may cause an immense earthquake potential and cause disaster. The coastal areas that will be affected by the tsunami, the countryside, and the seven sub-districts will be affected. The hazard impact modeling found three groups, namely low, medium, and high. The lowest areas have the highest tsunami potential because very low land makes tsunamis more likely to occur; it is classified as being hit by a tsunami. As for the height above 30 meters and above, it is classified as tsunami-prone. Finally, at an altitude of 30 meters and above, it is classified as safe from a tsunami threat. In this study, researchers used overlay techniques on thematic maps such as distance maps from the coastline, elevation areas, slope areas, and distances from rivers. And use the Qgis application to process and process maps and the Arcgis application to create map layouts. The technique used in making tsunami hazards using the overlay technique is done using scoring and weighting methods to get the expected results.

Keywords: *Tsunami, Geographic Information System, Garut, Overlay Technique*