

Assessing the Impact of Flood Induced by Sea Level Rise and Land Subsidence in Semarang City

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SUMMARY

Semarang faces strategic issues, one of which is land subsidence. Land subsidence is a phenomenon that is still happening in Semarang City. This is inseparable from the impact caused by land subsidence. Land subsidence makes an impact both directly and indirectly. Direct impacts can be identified from the presence of building cracks, tilted buildings, abandoned buildings, and infrastructure damage. Meanwhile, indirect impacts are floods, decreased quality of life, creation of slum areas, and decreased income.

The impact assessment is very important for the purposes of flood management and decision making for mitigation steps. Many research studies in the city of Semarang related to impact mapping have been carried out. The studies include mapping the spatial distribution of the locations of damage identified as damage caused by land subsidence, as well as an assessment of the losses suffered by the economic, social and environmental sectors respectively.

This paper aims to present a literature review on assessment of the impact of flood in Semarang City, detailing its applications and limitations. This paper also identifies and examines the types of data and methods used to obtain the value of losses due to flood caused by land subsidence in Semarang City. The paper also discusses the advantages of each method used.