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Optimising GIS in Cushioning the Environmental Impact of Infrastructural Projects

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Abstract : GIS is an integrating tool for storing, retrieving, manipulating, and analyzing spatial data. It is a tool which defines an area with respect to features and other relevant thematic delineations. On the other hand, Environmental Impact Assessment in short is both positive and negative impact of an infrastructure on an environment. Impact of infrastructural projects on the environment is an aspect of development that barely get extensive portion of pre-project execution phase and when they do, the effects are most times not implemented to cushion the impact they have on human and the environment. In this research, infrastructural projects like road constructions, water reticulation projects, building constructions, bridge etc. have immense impact on the environment and the people that reside in location of construction. Hence, the need for this research tends to portray the relevance of Environmental Impact assessment in calculating the vulnerability of human and the environment to imbalance necessitated by this infrastructural development and how the use of GIS application can be optimally applied to annul or minimize the effect.

Keywords: environmental impact assessment (EIA), geographic information system (GIS), infrastructural projects, environment

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