

Evaluation of Environmental Impact Assessment of Dam Using GIS/Remote Sensing-Review

Authors : Ntungamili Kenosi, Moatlhodi W. Letshwenyo

Abstract : Negative environmental impacts due to construction of large projects such as dams have become an important aspect of land degradation. This paper will review the previous literature on the previous researches or study in the same area of study in the other parts of the world. After dam has been constructed, the actual environmental impacts are investigated and compared to the predicted results of the carried out Environmental Impact Assessment. GIS and Remote Sensing, play an important role in generating automated spatial data sets and in establishing spatial relationships. Results from other sources shows that the normalized vegetation index (NDVI) analysis was used to detect the spatial and temporal change of vegetation biomass in the study area. The result indicated that the natural vegetation biomass is declining. This is mainly due to the expansion of agricultural land and escalating human made structures in the area. Urgent environmental conservation is necessary when adjoining projects site. Less study on the evaluation of EIA on dam has been conducted in Botswana hence there is a need for the same study to be conducted and then it will be easy to be compared to other studies around the world.

Keywords : Botswana, dam, environmental impact assessment, GIS, normalized vegetation index (NDVI), remote sensing

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020