Abstract

The Pumped Storage Hydropower plants are generally developed to improve the peak power scenario of any country in the world and also in India. These types of projects involve construction of upper, lower reservoirs and the supporting infrastructure includes cement concrete mixing plant, quarters for working staff, service roads and disposal ground, which in turn demanded a huge amount of forest and agricultural land. In this paper an attempt has been made to give an overview of Pumped Storage Hydropower plants environmental impacts using geomatics techniques. Landsat data and Advanced Spaceborne Thermal Emission and Reflection Radiometer’s (ASTER) Global Digital Elevation Model (GDEM) of 30 m resolution data have been used for processing, interpretation and analysis of various parameters. The overall environmental Impacts of pumped storage hydropower plants depending on the selection of site, shape and size of reservoir, operational regime, mitigating measures, can be limited, but must be evaluated case by case with detailed surveys including social and political aspects.
References

- A D Prasad, Kamal Jain, Ajay Gairola, Knowledge Based Pumped Storage Hydro Potential Site Selection Using Geomatics Techniques, - Under Review

Index Terms

Computer Science

Applied Sciences

Keywords

Renewable Energy; Pumped Storage Hydropower; Geomatics Techniques.