

## **Discovering Potential Sites for Small Hydro Power (SHP) in Nigeria**

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### **Abstract**

This paper is a survey and analytical work on the discovered potential hydropower sites in Nigeria by the authors. Hydrological data of dams and rivers have been collected from various locations in Nigeria. Mathematical model for energy conversion process to determine the plant generating capacities of the identified sites were developed. A computer program in Q- Basic has also been developed for fast analysis and accuracy. Simulations were done on the collected data. From the obtained results, about thirty-two potential sites have been discovered suitable to generate between 16kW and 700kW electric power. Appropriate turbine types were suggested.

**Keywords:** Electric Power, Human Development, Potential Sites, Small Hydropower Schemes