

OPERATION OF LARGE HYDROPOWER DAMS IN NIGERIA: SOCIO-ECONOMIC AND ENVIRONMENTAL ISSUES

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Abstract

Nigeria has three major existing hydroelectric power generating dams. These are Kainji, Jebba and Shiroro dams. These dams (Jebba, Kainji on the River Niger and Shiroro on the River Kaduna) have a total installed capacity of 1900 MW. Either by design or by the geographical configuration the three dams are located in Niger State of Nigeria, though their operational impact is felt in other states (Kwara, Kogi and Kebbi states). Any water impoundment has the tendency to create a number of effects on the environment ranging from the resettlement problems to perennial flooding, destruction of flora, fauna, loss of farm lands and fish species and displacement from ancestral heritage and exposure to alien diseases. The case is not different for the three dams. A detailed environmental assessment carried recently encompassed the upstream, dam site and the downstream areas. The study used desk and literature search, reconnaissance visits to the dams and communities affected by dam operations, administration of questionnaires, focus groups and village square discussion, laboratory analysis, statistical analysis, etc to capture the impact on host communities. The assessment shows that though the dams are still performing their responsibilities of supplying the nation with electricity. However, the operations of the dams has affected a number of communities especially those that are about 500 meters away from the river bank on regular time interval of four years when the river overflow its banks or irregularly when the PHCN open the gates of the dam spillways. The effects are mostly felt on income generating activities (farmland and crop destruction, fishing ponds) and property ownership (destruction of houses and loss of ancestral land and artifacts). There is inadequate compensation for the communities who are affected by the dam operation. Most of the host communities lack basic social and amenities including electricity. The dams have not provided sufficient employment opportunity for the people in the host communities, a situation that is almost and always inducing local protests and agitation for improved quality of livelihood.
