

Integrated hydrological data in a hydropower cascade

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Abstract The exploitation of hydropower potential has been recognized by the Ethiopian Government as a key issue in the economic development of the country. To meet the strong increase of energy demand in future years the Ethiopian Government has undertaken a series of actions for the construction of plants on the Omo River for hydropower generation. The Gibe Hydropower cascade system along the Gibe/Omo River, among others planned in the same watershed, provides a very significant improvement in this sense. The implementation of such a complex system requires a strong integration between types of technical expertise, among which hydrology is of great importance throughout all the project phases: from the preliminary planning to the technical design, to the final management. In each phase of the project the hydrological contribution is never a standard approach, but is a result of a fine calibration of methodologies according to the requested degree of approximation and the available data.

Key words hydropower cascade; Ethiopia