

THE IMPACT OF HYDRAULIC RESOURCES ON SUSTAINABLE DEVELOPMENT OF THE TIMGAD BASIN NORTH-EAST OF ALGERIA

Djaiz Fouad* & Atamnia Ali**

** Faculty of Science, University of Batna/Laboratory of Geology and
environment,*

University of Constantine, Algeria.

*** Faculty of Engineering, Department of hydraulic, Batna University.*

Abstract

Algeria has undertaken a great project consisting to realise an interconnection hydraulic Work in objective to be satisfy in resource water for population and agriculture. Timgad basin located in Aurès is characterized by a particular morphostructural relief with dense streams which favorise streaming rain water. This basin includes globally detrital geological formations represented by argilious and sand of Miocene. Concerning agriculture development in this area and to supply neighbouring population with fresh water, Foug Toub site is choose to built a reserve collinear. Geological and geotechnical investigations give interesting results concerning place. However from hydrological study appear that an important solid volume, on twenty years, is largely over capacity water. Then the apparition of this new problem makes this project unrealisable and the site must be changed. It is interesting to build another Work with great capacity on another site taking in account the characteristic of the catchment area. The second proposal will could be assure a sustainable development with availability of water. The handling methods of transported sediments must be applied in upstream in order to increase the life time of water stopping.

*Key words: North-Eastern Algeria, Timgad basin, Hydria resources, sustainable development
Geology, Geotechnics.*