THE PROBLEM OF THE UNDERGROUND DAMS IN THE SOUTH OF ALGERIA.

CASE OF UNDERGROUND FLOW DAMS OF OULED DJELLAL.

BENLAOUKLI B

Laboratory of Water Resources Mobilization and Valorization "MVRE".
ENSH, LP 31 Blida. Algeria. benlaouklib@yahoo.fr

Abstract

For a self subsistence agriculture, especially the watering of the ovine herds, the sector of hydraulics wants to obtain a significant infrastructure of mobilization of the water resource as realization of underground dams in the south of the country. However, the designers of hydraulic structures, not having great experience in this field, beats on problems of a dimensional, in the design jig and nature of structure to consider for the local climatic and geological conditions, which are rather complex in general to taking into account, in particular the lithology preceding the substratum, and the availability of construction materials which are often rare in these arid areas.

These works is done on large rivers of the region of Biskra characterised by arid hydrology (flash flood). Much of the flood waters seep into the soil to reach the groundwater we worked on the underground dam in Jdi at Ouled Djellal. The underground dams are used in this case to improve the availabilities of subsoil water in the valley.

The Water Resources Office of Biskra considered a study of an underground dam to stop the underground flow. The main objective of our work is to discover the best design with taking into consideration all the conditions and constraints of the area. A thorough analysis of the possible variants, revealed the best solution. For example the choice of the outlet is differently made that for the surface structures.

Key words: Underground, Structure, River, Outlet, Dam, Ground water.