

TO WHICH HYDROMETEOROLOGICAL DATA ALGERIA NEEDS?

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Abstract:

Water represents one of the essential keys of the durable development. Nowadays, Algeria is facing a problem of scarcity and management of water resources. Nowadays, Algeria is facing a problem of scarcity and management of water resources. Moreover, it knows these last years natural disasters caused by torrential rains and consequently a devastating floods provocative an enormous damage in human and material loss. The floods which became very frequent these last years, cause a considerable damage in human life (Tiaret: 6 dead, Tissemsilt : 1 dead, Médéa : 8 dead, Djelfa : 1 missing family, Ain Defla : 2 dead, Bouira : 4 dead, Msila : 5 dead, Bordj Bou Arreridj : 2 dead) plus a material damage (billion dinars). By this work, we tried to clarify the negative implication of the lack of reliable data in quantities and qualities, by giving some examples relating to rains, floods and to the dam siltings. We showed the importance of the installation of the new pluviometric stations to cover the summits and the arid regions. These observations were drawn from the undertaken work in order to establish the pluviometric map of the North Western of Algeria. We also showed the difficulty in correctly representing the surface flow by studying the largest basin of Algeria, Chelli-Zahrez basin. The study of the dams silting up showed these limits because of the insufficiency of the reliable information system. From where, the need for a dense network and experimental sites able to provide the necessary information for the forecasting and the management of the water resources. The last years were characterized by torrential rains which had caused a catastrophic floods. For a better management of these extreme cases, it is necessary to install a rainfall recorder network denser than existing, especially in the risked areas; To install gaging site before the risks zones; To increase the number of gauging stations along the oueds responsible of the inundations. It is recommended to create a data acquisition system in real time connecting all the measuring sites. To have a representative rainfall records of the pluviometric regime on the level of a basin threatened by the floods. It is useful to install pluviometric stations for the announcement floods system. Their data are integrated, in real time with the hydrometric data, in a forecasting system of floods and alert system. (used in a adaptable mathematical models to the areas studied for a better forecasting of those floods and to alert, at times, the public authorities and to allow them to take the adequate decisions). These networks must be integrated in a regional group (maghrébin and Mediterranean) for a better collaboration in the climatic situations forecasting

and the natural disasters caused by the torrential rains like what happened in Algiers between 9 and 11 of November 2002 (The 10 November, with it only, recorded 169mm, period is approximately 90 years). From there, we have noticed that the water problematic is posed with an increased acuity in the country. This situation will be exacerbated by the future evolution of the climate characterized by the variability and the increase in the extreme phenomena. Hence, it is urgent to integrate the forecasting in any policy of mobilization and management of the water resources.

Keys word:Hydrological data; information system; Algeria