



Integrated management of water resources

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Water resources occupy an important place among other natural resources, water being the most widely large resource in the world. In different quantities, it can be found everywhere and play an important role in human life and environmental balance. Importance have a great freshwater resources, because all human activities and life itself are dependent on water, it not be substituted by other resources. Water resources of Romania are made up of surface waters - rivers, lakes, the Danube - and groundwater. The main water resource of Romania is an inside rivers. A basic feature of this type of resource is a very large variability in space: - mountain area, which makes half of the total elapsed; - variability specific environmental flow (1 l/s*km^2 - in low areas up to 40 l/s*km^2 - in high areas). Another feature is a very pronounced variability in time, so spring is important flood production, followed by prolonged drought. The river Danube, the second largest river in Europe, with a length of 2,850 km, of which 1,075 km within the territory of our country, with an average stock entering the country of 174 mild m^3/year could be the most abundant source water. The international or impose certain limitations in the use of its waters and therefore the resource is considered only half the average volume multi elapsed on the Danube. Underground water resources consist of existing water storage in aquifer layers and layers of groundwater deep sea, assessing them difficult. Potential natural water resources in Romania is 137.8 bn m^3/year of the Danube 87.8 billion m^3/year , inside rivers 40 billion m^3/year and groundwater 10 billion m^3/year Divided by the current population of the country, give a specific resource, in natural, cca.1840 $\text{m}^3/\text{citizen.year}$, taking into consideration only the river intake inside situated our country, from this point of view, in the category of the country with reduced resources water as the average Europe 4700 which is $\text{m}^3/\text{citizen.year}$