



## Water balance of the Lepenci river basin, Kosova

L Osmanaj and S Avdullahi

Department of Hydrogeology, Faculty of Mining and Metallurgy, Parku Industrial NN, 40000 Mitrovica, Republic of Kosova  
olavdim@yahoo.com

Republic of Kosova lies on the highlands (500-600 m above sea level) surrounded by the mountains reaching the altitude of more than 2000m. Lower mountains divide the highland plain into four watershed areas, from where waters flow to three different seas, namely to the Adriatic Sea, the Aegean Sea and the Black Sea.

Kosova has four water basins, such as the Basin of river Drini i Bardhe, Ibri, Morava e Binches and Lepenci. The Basin of river Lepenci is located in South-eastern part of Kosova with surface of 650 km<sup>2</sup>, belongs to Axios river basin discharging into Aegean Sea. The annual rainfall is 670-1.000 mm and specific runoff 8 – 20 l/s/km<sup>2</sup>. There are also steep mountains in this area.

In this case study we have calculated the water balance of the river Lepenc Basin. The Basin of river Lepenc we have divided into 3 catchments: of Nerodima river, and upper and lower part of river Lepenci. This basin is covered by three municipalities such as municipality of Ferizaj, Kaçanik and Shterpc.

The data on precipitation are obtained from three metering stations, such as the metering station of Ferizaj, Kaçanik and Jazhnice. The obtained records are elaborated. For evapotranspiration measurement we have applied four methods: the method of BLANEY – CRIDDLE, radiation, SCHENDELE and Turk.

In a basin of river Lepenci we have four stations for measuring the discharges and levels: in Ferizaj, and Kaçanik - Nerodime river and in Hani i Elezit – Lepenc river.

The river basin Lepenc has two inflowing points, where are Lepenci river in the border with the FYR of Macedonia and Sazli village near Ferizaj.

Key words: precipitation, evaporation, flow, river, discharges,