*J. Int. Environmental Application & Science,* Vol. 7 (3): 461-472 (2012)

# Geodiversity of the Bosnia River Basin's Upper Reaches

Mevlida Operta[1,*], Suada Pamuk[2], Kemajl Kurteshi[3]

[1]*University of Sarajevo, Faculty of Science, Department of Geography, Sarajevo;* [2]*Energoengineering, Sarajevo;* [3]*Univeristy of Priština, 40000 Kosovo*

*Received January 19, 2012; Accepted July 09, 2012*

**Abstract:** The Bosnia River is the longest river in Bosnia and Herzegovina. It rises beneath the Igman Mountain, close to Ilidža, locality of Vrelo Bosne. The river flows through the central part of Bosnia and after 270 km of the course, near Bosanski Šamac, it empties into the Sava River. The Bosnia River basin is morphological heterogeneous, which is in connection with the geological structure of the terrain. In the source part of the Bosnia River there is the huge Sarajevo-Zenica valley with Dinaric stretching direction. Morphological, it consists of a number of smaller or larger fields, so that in its upper reaches, the Bosnia River runs through the Sarajevo, Visoko, Kakanj and Zenica fields. In the middle reaches, the river breaks through the gorges cut into the firm rocks, Vranduk-Nemila and Maglaj-Doboj, while in the lower reaches, from Doboj to the mouth, it flows by the unstable riverbed through the alluvial plain where it makes number of branches, islands and curves. This paper gives the analysis on geomorphologic and hydrographic characteristics, then geological-tectonic, hydrogeological and engineering-geological characteristics of the Bosnia River basin in its upper reaches. During the work, there have been used methods of analysis and synthesis, cartography and terrain-research method as well as statistic and comparative method. During the research, the following documentation have been used such are sheets OGK (The Main Geological Maps, scale 1:100 000) of Sarajevo, Zenica,Vareš, Bugojno and Prozor, HG (Hydrogeological map, scale 1:100 000) of Yugoslavia, and attached legends for these papers as well as literature data.

***Keywords:*** *river Bosna, geomorphologic and hydrographic characteristics, geological-tectonic, hydrogeological and engineering-geological characteristics*

[*]*Corresponding: E-Mail: opertamevlida@yahoo.com; Tel: +387(0)33 723 754; Fax: +387(0)33649359*