SUSTAINABLE DEVELOPMENT OF FORESTRY AND CONSTRUCTION OF SMALL HYDRO-POWER PLANTS IN BOSNIA AND HERZEGOVINA

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The idea of sustainable development is clearly reflected in the fact that the growth of human population is one of determinants of the development of human civilisation and social system on our planet. On the other hand, this development comes at a cost of exploitation of another system – natural (space and resources), which is yet to become an issue in the future. It remains a fact that the human population cannot be denied of this right, but the range and manners of this exploitation should and must be challenged.

The fact that this process is an excessive one is evident from the fact that the natural balance is being more and more endangered, with one of the most topical issues being deforestation in the geographic layer. With regard to this, the issue of protection of forest complexes and forest ecosystems is a multi-layered one, where the construction of small hydro-power plants (SHPP) is one of major challenges.

The research is based upon the fieldwork of authors at the sites of numerous watercourses in Bosnia and Herzegovina, as well as on a detailed analysis of meteorological, hydrological, and bio-geographic data concerning the basins of rivers of Vrbanja and Velika Usora respectively. Due to the disturbance of the balanced specific flow in the basins, there are records of forestsć vulnerability, increased risk of erosion and occurrence of high and low waters.

Key words: sustainable development, forests, small hydro-power plants (SHPP), water regime, erosion.