

The water resources of Montenegro could not be used in a satisfactory way without building large and medium-sized hydro power plants, fitted into the integral development projects of the state, said Goran Sekulić, associate professor in the Department of Hydraulic Engineering at the Faculty of Civil Engineering in Podgorica.

He said that it was a great advantage that reservoirs with annual flow regulation can be formed on various rivers, such as the rivers Piva, Morača, Ibar and Ćehotina, as well as that such plants were particularly valuable due to the possibility of producing highly valuable peak energy, for which there is an increasing demand.

"Such energy can always be marketed very profitably or exchanged for a major quantity of basic energy, which is highly represented in the electric power demand of Montenegro. We cannot achieve nature protection, which is persistently insisted upon, if we are poor and we do not have a profitable product which will lead to an increase in the overall state revenue", Sekulić said for the newspapers Electric Power Industry .

He added that energy was a product which would certainly find a buyer and create the conditions for investing in environmental protection.

Sekulić believes that Montenegro has a great development advantage, because it possesses very important hydro power resources by which a significant part of its needs for electricity could be satisfied, as much as 75 to 80 percent of the potential demand.

"This most valuable development resource should be used in a convenient and sustainable manner within integral development projects", said Sekulić.

The strategy for using water power has been rounded off in the state planning documents, but also in the two monographs of the Montenegrin Academy of Sciences and Arts (Serb. CANU) titled Hydro Power Resources of Montenegro and Water Resources of Montenegro, in which the utilization of this resource has been considered in the context of integral multipurpose systems, with hydro power plants as priority facilities.

"The solutions are based on the implementation of large and medium-sized facilities, by which multipurpose systems would be completed on the rivers Piva and Komarnica, Morača, Lim, Ćehotina, Ibar, but also on the parts of the course of the river Tara and on the Drina, within the project Buk Bijela, according to the concept by which the outstanding ecological values of this river would be fully preserved, and the water regimes and environmental conditions in it would be enhanced", said Sekulić.

He said that the projects that are of highest developmental relevance for Montenegro had the advantage. These are the projects which would form comprehensive systems and which, in addition to having the economic effect, would also result in the development and regulation of valley areas before all.



"This is primarily the cascade system on the river Morača, according to the version with a lowered elevation of the reservoir Andrijevo because of the better integration into the environment, with the frontal reservoir facility Dubravica, which would perform the annual flow regulation, bestowing great value upon this cascade system", said Sekulić. According to him, there is also the use of the upper part of the river Piva's course, stretching from Komarnica to Šavnik, for which there is a well-developed solution, in all functional and compatible with the hydropower plant (HPP) Piva, as the best ever project implemented by the state of Montenegro.

"Of course, there is also the river Lim. It should also be said that it is still not too late to go back again to the outstanding project of the HPP Buk Bijela on the river Drina in cooperation with the Republic of Srpska, which has been rejected due to a superficial and one-sided presentation, without stating all effects, even those in terms of ecology and tourism", said Sekulić.

He believes that this is an excellent development project which does not jeopardize the river Tara and which can be harmoniously fitted into the surroundings, and it would also solve some burning issues related to the use and environmental protection of the lower course of the river Piva.

"Those who are against this project have probably never been informed about its development possibilities and environmental benefits", said Sekulić.

He said that it was a big misconception that Montenegro did not need new energy projects due to negative environmental impact.

"This is a big misconception of one part of the insufficiently informed public, which comes down to repeating the mantra that large hydro power plants are harmful to the surroundings, which is why we should build small hydro power plants, which, allegedly, do not endanger the environment. Or that energy issues can be solved by a multitude of small so-called alternative energy resources", said Sekulić.

He added that the ecological and economic reality was exactly the opposite, because large energy facilities could be harmoniously fitted into the surroundings through adequate measures.

"Precisely the reservoirs, by mitigating flood waves, contribute to the protection from the largest ecological destruction – uncontrolled floods, and in dry periods, by intentionally discharging a large amount of water with respect to the inflows, they affect aquatic ecosystems very positively", Sekulić explained.

He said that all large facilities had been perfectly fitted into the surroundings through the planning measures, which was not always possible with small hydro power plants, because



in them, the entire head was achieved through major pipeline derivations, mostly conducted along the terrain, which was one of the most drastic ecological destructions.

"Should we continue to behave destructively towards small rivers, trying to squeeze these most valuable parts of the environment into pipelines, we will cause an irreversible damage to Montenegro, which has a strategic orientation to be an ecological state", said Sekulić. He believes that the areas suitable for building dams, which are simultaneously accompanied by river stretches on which reservoirs can be formed without major restrictions, represent a priceless national wealth of the country.

"This is why, in all countries, such areas are strictly protected by spatial plans and plans for special purpose areas. In our country, unfortunately, voluntarism is allowed in terms of the uncontrolled, unplanned acquisition of areas, and in particular, the areas planned for the implementation of large development projects within the sphere of waters. The consequence is an utterly unreasonable destruction of the most valuable hydro potentials by the issuance of permits for building small facilities in the areas planned for the construction of facilities of great national importance, exclusively with the aim of achieving petty, private interests", said Sekulić.

He warned that, during the process of granting concessions for the construction of small hydropower plants, more account should be taken of the "overlapping" of offered watercourses and their profiles with the areas which should be the backbone of large and crucial facilities in the use of hydro potential.

"So now, we have the situation in which investors have put significant funds into exploration and the construction of small hydro power plants and they have objectively gained the right to use this resource for several decades, and they have practically disabled the state from building a much more profitable large facility. This inconceivable extravagance in the use of space threatens to completely destroy some very important development projects within the sphere of waters", said Sekulić.

He said that, when a system had been planned, a special purpose area plan should be adopted immediately as an integral element of its documentation.

"As, most often, it is necessary that an area be urgently protected against misspending, frequently, such plans can also be made in a simplified procedure, so as to prevent the particular area from being developmentally devastated by various, incomparably less significant, facilities", Sekulić concluded.

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