## **Proceeding Book of ISESER 2023**

## O 4. OBSTACLES TO AQUATIC ECOLOGY AND WATER CORRIDORS AS PART OF CLIMATE-ADAPTIVE SOLUTION TO A COMPLEX PROBLEM

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**ABSTRACT:** This article is based on long-term research approaches on fish and associated aspects of River Drini (including both Black and White Drini). It was dealing with habitats and aquatic species with focus water connectivity at the landscape contexts. Biodiversity and particulary native fish populations and particularly endemic fish species in the Drini river system (all littoral countries) are threatened by several anthropogenic activities and factors like: (i) Water pollution caused mostly due to a lack of the waste water treatment facilities as well as a lack of integrated management approaches; (ii) Relatively unregulated fishery practices and illegal fishing, use of destructive methods of fishing; (iii) Non native fish species, accelerated abundance with unpredicted sequences to native endemic species; (iv) Impacts on specific spawning grounds for specific species particularly due to serious impacts caused by water use in the agriculture sector with a constant presence of run-offs and no abatement plans; (iv) Poor integration of fishery management practices into the entire management of the area (including protected one as Nature Park Korrab-Koritnik, etc) which is recognized internationally for its rich biodiversity and abundance of species, proclaimed as an important area for the conservation of European species and habitat., and IBA; (v) Low rate of local awareness for the fish biodiversity, conservation threats. The awareness and knowledge is just limited to a couple of commercial fish species.

The fish assemblage of Black Drini River is rapidly changing and similarly to wider Mediterranean area it is expected that will follow in a situation of increased anthropogenic impacts and climate changes by the introduction of alien species. Being situated at the proximity with connected Lakes, neighboring one and associated tributaries and systems where the assemblages are rapidly changing, there is a relatively a high risk of changes regarding the composition and share. In our case with alien species, we have to consider both exotic ones and those translocated from other ecoregions.

Keywords: Landscape, Ecological Connectivity, Aquatic Species, Conservation, Water Quality