

The research regarding water area network maintenance method

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In this research, the network, by agricultural waterways connecting rivers, small reservoirs and water rice fields, is defined as water area network, and then we clarified the transition of water area network and actual condition of its fragmentation by case study. Moreover we analyzed cause of the fragmentation from physical conditions, and aimed to propose the methods of water area network maintenance and restoration.

As a result, we verified that the cause of figure change of water area network was levee constructions which associated with river renovation projects, making rice fields and land improvement projects aiming more efficiency of drainage in postwar days.

We assessed ecological functions of the “wando” (riparian side arm of river), which is viewed as high efficient compensation method of water area network, which might be lost. In the “wando”, existence of fish communities, which have different structures from rivers’ ones, function of biotope for young fish, fish behavior using flow channels between rivers and the “wando”s were verified, and also, the “wando” is high efficient compensation method of water area network, which might be lost, was indicated.