RESEARCH ON MANAGEMENT AND INSPECTION OF DAMS FOR 1000-YEAR-OLD DAMS

Abstract: A major theme of 21st century is "Sustainable Development of Society", and the water issue has become an important task to achieve it. Construction of a dam is in one of the most efficient measures to solve the water problem. However, in our country is now, the new dam construction will be difficult because of the tight fiscal situation and the environmental conservation, while the redevelopment project will increase to effectively use existing dams. In addition, to ensure the effective use of existing dams, the individual existing dam must behave safely over the long term. Therefore, a diagnostic inspection of dams, should be made to promote low-cost management for dams and ultra-long life dams.

In this research, the following investigations are made to find a specific policy to achieve the above objectives, ①case studies to determine the cause of aging and deterioration, ②numerical simulation to analyze the impact on the safety of aging and deterioration, ③extraction of perspective and the necessary validation of current safety management for various forms of aging and deterioration.

Keywords: dam, redevelopment, effective use, aging, inspection, repair