Research about stability assessment of landslide slope at the time of reservoir level drop

[Point]

Residual interspatial water pressure that occurs inside a slope has a great impact on stability of landslide slope at the time of reservoir level drop. Therefore, it has been required to set residual interspatial water pressure more rationally, and to develop a technique that can appropriately assess stability of landslide slope. In this research, applicability of a technique that used statistical model, water circulation model, and seepage flow analysis, as a setup method of residual interspatial water pressure, was studied, and a setup method of saturated hydraulic conductivity that was considered important upon conducting seepage flow analysis was studied. As a result, a technique in which saturated hydraulic conductivity was obtained by pumping test and residual interspatial water pressure was calculated by conducting seepage flow analysis was the most accurate and highly applicable.

Keywords: landslide, residual interspatial water pressure, seepage flow analysis, in-situ permeability test, saturated hydraulic conductivity