Research regarding stability of earth-fill-dam under large scale earthquake condition （Part 2）

[Point]

Earth-fill-dam is consisted with one kind of material; therefore, easy regarding corresponding to water demand, however, seismic stability hasn't clarified, yet. In this research, objecting sandy earth-fill-dam, we clarified effects of some conditions, such as tamping on foundation ground and levees, and fine fraction content rate, on seismic displacement behavior of earth-fill-dam by dynamic centrifuge model test. Moreover, we proposed the calculation dynamic analysis method of levee body's displacement, considering pore water pressure increase caused by reservoir.

As a result, we clarified that levee crown settlement inhibition is possible by keeping fine fraction content rate of levee bodies higher than certain amount and also, well tamping on foundation ground and levee bodies.

Keyword：earth-fill-dam, earthquake , centrifuge modeltest, dynamic analysis