

Ecology and economics of irrigation in the south of Ukraine following destruction of the Kakhov reservoir

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The rupture of the Nova Kakhovka dam on 6 June 2023, resulted in the termination of water distribution to southern Ukraine and Crimea, affecting 750 000 ha of farmland that relied on irrigation. The Kakhov irrigation system serves as a case study to demonstrate the organisation of crop rotation and the economic viability of irrigated farming. We also consider the potentials of future agricultural development in the region and a novel conceptual strategy for water management and changes in irrigation methods to conserve energy and resources.

KEYWORDS: Kakhov reservoir, water resources, safety, irrigation.