

Drainage Effluent for Raising Crops

Rationale

The irrigation system in Sindh province, supported by the Indus River basin's three major barrages-Gudu, Sukkur, and Kotriand fourteen main canals, irrigates around 5 million hectares of land. However, the system faces significant challenges due to inadequate drainage management, uneven land distribution, rapid population growth, and socio-economic pressures. These factors have resulted in excessive water usage, leading to widespread salinity and waterlogging in nearly one-third of the canal-irrigated areas. The practice highlights usage of SCARP tube well drainage effluent during surface water shortages, either in conjunction with or instead of surface water, to sustain crops and support long-term agricultural resilience, enhance water efficiency, and mitigate the negative impacts of waterlogging and salinity.