

SALINATION DYNAMICS AND SOLUTION SUGGESTIONS IN SOIL OF HARRAN PLAIN IRRIGATION PROJECTS

YILDIZ GÜLAĞACI Remziye

General Directorate of State Hydraulic Works, GAP 15th Regional Directorate, 63300
Şanlıurfa, Turkey remziyey@dsi.gov.tr

150.000 ha area has begun to be irrigated since 1995 in Harran Plain and area reached water. However, high water table problem has considerably emerged along with irrigation in Harran Plain. According to our periodic ongoing monitoring and evaluation research after 1995, 50.000 ha area has been under the influence high water table. In addition, a large number of villages have been affected by reason of high water table. It is stated that 5.000 ha area has been exposed to excessive salinization and 12.000 ha area has encountered severe and risky salinization. Therefore, salinization potential was determined in 17.000 ha area in totally as a result of irrigation (General Directorate of State Hydraulic Works, 2008). Existing drainage channels remain incapable due to excessive water use and low water-use efficiency (WUE). Field drainage projects which have been made in recent years fail to satisfy salinization issues. Furthermore, tendency of excessive water use increase salinization and it continues to enhance. The main reason for excessive water use arise from (i) taking irrigation fee as spatial (hector) and (ii) wrong approach by assuming excessive water use forms much crop. Field drainage facilities (closed system) should be immediately established in the whole project to solve these problems. Other solutions for salinization dynamics, essentially, farmers should be trained. Moreover, subsurface drainage systems and modern irrigation techniques (sprinkler and drip irrigation method) should be urgently performed.