GROUNDWATER QUALITY FOR IRRIGATION IN RAWALPINDI DISTRICT

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ABSTRACT

A study was undertaken in Rawalpindi district to categorize suitability of tubewell waters for irrigation. Out of 96 water samples taken from different tehsils of Rawalpindi district, 71 percent were fit, 9 were marginally fit and 20 percent were found unfit for irrigation according to the suitability criteria of water quality evaluation. All water samples belonging to Kotli Satian Tehsil were fit and only one out of eight water sample was unfit for irrigation in Murree tehsil. It indicated good quality of irrigation water in these tehsils. Most of the water the samples unfit (17%) were because of higher electrical conductivity (E.C). Residual sodium carbonate (RSC) were present in few of the water samples analyzed, while 93 percent water samples had sodium absorptive ratio (SAR) within prescribed permissible limits. This indicates that there is no sodicity problem in these waters and only problem of higher soluble salts concentration (E.C). The data also indicated that quality of available water in most of the district is still suitable for raising crops and orchards.