M.Sc THESIS

ASSESSMENT OF DIVISIONAL ROTATIONAL PLAN ON SHORTAGE OF WATER FOR MAIN LINE LOWER (MLL) UPPER CHENAB CANAL (UGC) SHEIKHUPURA DIVISION



ADVISOR

PROF. DR. ABDUL SATTAR SHAKIR

SUBMITTED BY:

SYED ABBAS ALI 2013-MS-WRE-10

CENTRE OF EXCELLENCE IN WATER RESOURCES ENGINEERING University of Engineering and Technology, Lahore Pakistan

Abstract

Rotational planning is widely used in Punjab province for flow distribution in its irrigation system. Rotation plans, prepared by Punjab Irrigation Department for each division, are implemented throughout the year during both Rabi and Kharif seasons. It is considered essential that the rotation plans must be followed and the demands be met equitably.

This research study was undertaken to assess and evaluate the implementation of seasonal rotation plans for Main Line Lower (MLL) Upper Chenab Canal (UCC) Sheikhupura Division. The rotational plans and historic discharge data was collected form the concerned departments and analyzed to assess the plan implementation by estimation of delivery performance ratios, Gini coefficients & Lorenz curve plots for each Rabi and Kharif season. The obtained results and findings have been discussed.

The overall study results proved satisfactory with few deviations from the initially planned rotations. At the end of the study, suggestions have been proposed for improvement in assessment of departmental rotational plans.