

THESIS

REASONS FOR NON-ADOPTION OF PRESSURIZED  
IRRIGATION SYSTEM BY THE FARMERS IN PAKISTAN



ABUZAR SALEEM  
(2006-PG-WRM-25)

For the Degree of

MASTER OF PHILOSOPHY

IN

WATER RESOURCES MANAGEMENT

CENTRE OF EXCELLENCE IN WATER RESOURCES ENGINEERING  
UNIVERSITY OF ENGINEERING & TECHNOLOGY, LAHORE, PAKISTAN

2011

## ABSTRACT

The pressurized irrigation methods allow efficient utilization of water and these methods have been adopted in many countries on a variety of crops with success. Unfortunately, the pressurized irrigation methods have not been adopted by the farmers in Pakistan at large scale. The present study is an attempt to investigate and analyze causes of non-adoptability of pressurized irrigation system in Pakistan. A survey in different areas of Pakistan was conducted to investigate the reasons for non-adoptability of pressurized irrigation system. This survey covered many factors in detail like cost, material availability, maintenance, labor and operation of the pressurized irrigation system that may affect the un-adoptability of the system i.e. sources of water supply, cropping intensities, cropping pattern and power sources, awareness of pressurized irrigation system to farmers were also incorporated in the analysis.

The results suggested that initial cost of pressurized irrigation system is more than double of flood irrigation system in the selected areas. It was also revealed that the repair and maintenance cost of pressurized irrigation system is very high due to non-availability of material and skilled labor. In most of areas, the farmers are not willing to adopt pressurized irrigation system because they are not properly trained and aware of merits and demerits of the pressurized irrigation system. The economic analysis carried out in this study showed that benefit cost ratio of drip irrigation system is 1.71 and that of sprinkler irrigation system is 1.23. On the basis of the results of this study it is recommended that the government and manufacturers should provide proper training programs to create awareness to the farming community.