

**CONSTRAINTS IN THE ADOPTION OF HIGH EFFICIENCY IRRIGATION
TECHNOLOGIES
COMPLETED BY**

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High Efficiency Irrigation System (HEIS) is recognized worldwide as the most efficient and feasible irrigation method particularly for growing high value crops but its adoption in Pakistan is confronted with serious problems, which need to be investigated. This research project was undertaken to conduct a detailed survey in all agronomic zones of Punjab to find out the factors/reasons responsible for impeding adoption of HEIS by the farmers. A sample of 242 respondents (farmers, stakeholders including service suppliers, NGO's and Government officials) were interviewed using three pretested different questionnaires. The respondents comprised four categories i.e. HEIS adopters of drip and sprinkler, those who adopted HEIS but discontinued, those who did not adopt HEIS named as non-adopters, and professionals. The data analysis prioritized the factors as those financial issues, less backup support/repair and maintenance, intensive supervision, availability of skilled operator, small land holdings, absentee land owner and operational problems were found as the main constraints in adoption of HEIS. The motives behind farmers' decision to adopt HEIS were also analyzed empirically using endogenous switching regression (ESR) technique. The ESR results complemented the inferences, derived from descriptive data analysis. The ESR analysis indicated that farmers having favorable resource base, young and having better access to education / awareness (formal and informal) along with other indicators such as availability of skilled operator, frequent contacts with professionals and non-occurrence of financial issues increased chances to adopt HEIS. Based on these results, it is suggested that level of awareness and education, training of farmers need to enhanced. It is proposed to launch skill development programs at the demonstration farms to train youth for growing high value crops using HEIS through enabling environment and providing backup support to make farming profitable.