WHO WILL THINK OUTSIDE THE SINK? FARMERS' WILLINGNESS TO INVEST IN TECHNOLOGIES FOR GROUNDWATER SUSTAINABILITY IN PAKISTAN

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Abstract

Concerns over depleting aquifers tend to recommend water-saving irrigation technologies as a potential solution. This study examines farmers' enthusiasm towards one of such technologies in four southwestern districts of Pakistan. The required information was obtained through a survey questionnaire administered to a sample of 283 groundwater users, and it was analyzed descriptively and via an ordinary least squares regression technique. Results indicate that adopting water-saving technologies is less likely in the absence of incentives such as subsidized system installation, a reliable supplier who can provide warranties on the system's service and spare parts, and training the participating farmers. Besides, promoting such technologies would be relatively easier in the southern region due to those farmers' relatively greater enthusiasm there compared with their northern counterparts. We conclude that promoting technologies such as drip irrigation may continue, but only as the mandatory initial step of a broad-based strategy aimed at nurturing water conservation values at the societal level. Among various possible interventions, enhancing water literacy is extremely important so that farmers discover and correct wasteful aspects inherent in their current irrigation practices, work through options to minimize those wastages, and develop a sense of water conservation as a collective social responsibility.

Keywords

Arid agriculture, aquifer depletion, drip irrigation, tubewell, water literacy, water-saving technologies

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