Is there is relationship between agricultural land value and treated wastewater irrigation for agriculture: A hedonic pricing approach

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Abstract

This present study has employed the hedonic pricing technique to calculate the value of marginal changes in the characteristic of treated industrial wastewater irrigated farm land in Tamil Nadu, India. A sample of 240 farmers was selected through multistage random sampling technique. The major findings of the analysis revealed that, the additional income obtained from agricultural land value in sample farms using treated wastewater was higher by INR 13.34 lakh while compared to control farm. As one would expect, agricultural attributes are very important determinants of agricultural land prices followed by environmental attributes and location attributes. Implicit values for transport facility, number of irrigation, bore and open well availability, land quality index and vegetative cover are embedded in agricultural land prices and there is evidence that the use of treated wastewater reuse for agriculture can improve the fit of the hedonic price regression. Distance between cisterns to farm significantly reduces the land value. In this present study emphasized that the use of treated industrial wastewater for agriculture is high potential for increasing the agricultural land value in the Tamil Nadu.

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