Determinants of nano fertiliser adoption among farmers in Nellore district of Andhra Pradesh.

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ABSTRACT

Nano-fertilisers are emerging as a promising innovation to improve nutrient use efficiency, reduce input costs, and enhance sustainable agricultural practices. This study examines the socio-economic determinants influencing the adoption of nano-fertilisers among farmers in Nellore district of Andhra Pradesh. Primary data were collected from 120 respondents (52 adopters and 68 non-adopters) randomly from four mandals and 8 villages by using personal interview method with a pre tested schedule. Descriptive statistics and Z-tests were used to compare socio-economic characteristics, while binary logistic regression was applied to identify the factors influencing adoption. The study revealed that a significant differences between adopters and non-adopters in terms of age, education, landholding size, annual income, and farming experience. Logistic regression analysis showed that age, education, landholding size, farming experience, access to agricultural information and annual farm income significantly influenced adoption. The findings highlight the need for targeted policy interventions focusing on awareness creation, capacity building, and improved information dissemination to enhance nano-fertiliser utilisation.

Keywords:*Andhra Pradesh, Logistic regression, Nano fertiliser and Socio economic characters*