

Factors motivating farmers participation in agricultural demonstrations

Karthick Radhakrishnan¹, Jay Anand², Ashwini Upadhay³, Binu Mathew², Naitik Sharma², Noor Hasan⁴ and Priyanka Mathur²

Abstract

Adoption of practices in different stages of agricultural production that has been examined by the researcher using a different statistical model is critical. The dependent and independent factors which impact the rate of adoption at the district level are always superficial and inconclusive. The recent study tries to estimate the factor determining farmers' willingness to give their plots for the demonstration for sustainability. The demonstration has been conducted to test climate resilient seeds varieties which are factoring adequate response of individual farmers. The regression was performed with the number of demonstration plots given by the individual farmers with the explanatory variables viz. socio-economic (age, educational qualification, number of dependency etc) and climatic variables (rainfall). The demonstrated plots for individual ranges from 1 to 8 plots. Cropin data (Digital database) which is captured in mobile based applications and face to face interviews among 3263 farmers from Mandla (2112 farmers) and Sheopur (1151 farmers) Districts have been used. The tested model (Truncated negative binomial count data model) has verified the factors determining willingness to adopt demonstration plots with the Pseudo r-square is 37%. The results suggested that illiterate farmers are more willing to provide the maximum number of demonstration plots and it's positively significant coefficient (2.841) to the willingness to provide plots. More interestingly, the female farmers are also coming forward to demonstrate new practices in their demo plots to enhance their agriculture production and enhance their sustainability. More specifically, the female farmers are not positively significant compared to male farmers, but there is less interest in testing with demonstration plot in the agriculture field.

Keywords: Central India, Demonstration plot, Farmer's adaptation, Truncated negative binomial count model

¹ Centre for Data Science, TARU Leading Edge, New Delhi, India. Corresponding author's email: kradhakrishnan@taru.co.in

² Centre for Social Transformation, Taru Leading Edge, New Delhi, India.

³ Madhya Pradesh Dhindayal Anthothaya Yojana (MP Day-SRLM), Madhya Pradesh, India, Madhya Pradesh, India.

⁴ Centre for GIS&IT, Taru Leading Edge, New Delhi, India.