

of the

## Rajasthan Geographical Association

### Volume No. XXXVI 2019-20

#### (An Annual Refereed Journal)



- *Exploring the Adoption Behaviour and Determinants of Agricultural Modernization using Path Analysis in Hathras district, Uttar Pradesh*
- *Spatial Prediction of Soil Erosion Risk by RUSLE Model in Kaushalya Watershed, Panchkula, Haryana*
- *Covid-19 effect: Labour migration, Economic recession and Implications*
- *Vegetation Cover and Forest Structure Assessment in the Amner Reserve Forest, Bhim Range, District Rajasmand*
- *Livestock Resource Development and Management for Dry Region of Rajasthan*
- *Ground Water Management in Nawalparh Block of Bhujwana District, Rajasthan.*
- *Regional Disparities in Agricultural Development in Bundelkhand Region of Madhya Pradesh, India*
- कोटा शहर में नगरीकरण एवं विकास के विविध आयाम
- सीकर जिले में कृषि उत्पादन के विकास स्तर : एक भौगोलिक अध्ययन
- भीलवाड़ा जिले में प्राथमिक शिक्षा के स्तर : एक भौगोलिक विवेचन (2017)
- राजस्थान विधानसभा चुनाव-2018 : अनुसूचित जाति एवं जनजाति निर्वाचन क्षेत्रों का निर्वाचन भौगोलिक अध्ययन
- भीलवाड़ा जिले में वी-संरक्षण : एक भौगोलिक विवेचन
- भीमघानगर जिले में जल-प्रदूषण परिसरों एवं निवासों के स्तर
- विराटनगर तहसील में सेवा केंद्रों का भौगोलिक अध्ययन

The Rajasthan Geographical Association



# Exploring the Adoption Behaviour and Determinants of Agricultural Modernization using Path Analysis in Hathras district, Uttar Pradesh

Dr. Pasarul Islam\*, Dr. Mumtaj Ahmad\*\* & Dr. Enayat Bano\*\*\*

## Abstract

*Modernization of the smallholder agricultural sector provides the stimulus and impetus to reducing development disparities across the world. The purpose of this study is to highlight determinants of agricultural modernization by the farm households of Hathras district in Uttar Pradesh. The study uses correlation, multiple regression, path analysis and z-score to access the adoption behaviour and determinants of agricultural modernization using 420 households in fourteen villages in Hathras district. The study finds that farm size, education, peer emulation, organizational support and agro-communication have greatly influenced the modernization process in agriculture in the region. The implication for policy and practice are discussed.*

**Keywords:** Agriculture, Farm Modernization, Agricultural Modernization, Path Analysis.

## Introduction

Modernization of the smallholder agricultural sector provides the stimulus and impetus to reducing development disparities across the world. This has been a subject of considerable focus among policymakers and development specialists not only at the level of farming households but also at the level of national and international policies (Omano, 1998). The agricultural sector plays a critical role in the Indian economy especially to millions of rural populations that depend on small scale agriculture for food and income. The sector contributes to about 16 percent of the Gross Domestic Product (GDP) and supports approximately 60 percent population that engages directly in it (FAO, 2018). Smallholder agriculture

remains the major engine of rural growth and livelihood improvement in the developing world (Hazell & Diao, 2005). Meeting the challenges of eliminating food insecurity and improving rural incomes in India will require transformation and transition out of the semi-subsistence, low-input, low productivity farming system that currently characterizes much of rural India (Islam & Ahmad, 2017). The existing yield levels of a majority of crops remain much lower than the world average. The predominant causes are small farmland, low irrigation, use of low quality seeds, low adoption of improved technology, and knowledge deficit about improved agricultural practices. However, the horizontal expansion of agriculture is quite impossible in India; hence it's time to