

Technology Adaptation Behavior of Rice Farmers for Climate Resilient Agriculture

**P. Muralidharan^{1*}, M.S. Rajeev², Reema Anand³, K. Sajnanath⁴, G. Lekha⁵, Anjali. R. Nathan⁶,
T. Sivakumar⁷ and Jesmi Vijayan⁸**

*ICAR- Krishi Vigyan Kendra-Alappuzha, CPCRI, Regional Station,
Kayamkulam, Kerala 690 533, India
E-mail: kvkalapuzha@gmail.com*

KEYWORDS Agro-ecosystem. Extension. Innovation. Integration. Participation

ABSTRACT This paper discusses the results of Participatory Action Research on an alternate extension approach called the socio-ecological extension system (SEES) implemented in Kuttanad, Kerala, India. It evaluated its capacity to promote climate resilient agriculture in the area by facilitating technology adaptations. It used the Technology Adaptation Index (TAI) to measure technology adaptation behavior of partner farmers (PF) under SEES. The TAI score of conventional farmers was also used to have a comparative analysis. The TAI of PFs showed uniformly high values compared to farmers under conventional extension on all three dimensions of adaptation measured, that is, context (29.57), content (26.0) and effect (28.50). It implied that the flexible framework for technology management under SEES with participatory communication and eco-friendly resource use as defining features has the potential to promote climate resilient agriculture in vulnerable agro-ecosystems. It can effectively address the issue of integration of natural and social processes with technological innovations to suit field contingencies.