ABSTRACT

Technological Impact on Socio-Economic Development of Farmers - A Multivariate Study

Vilas Balganonkar

Abstract: Science and technology (S & T) plays a major role in bringing about social and economic development and empowerment, especially in the rural area. Technological adoption by agricultural sector continues to play a crucial role in development of India. Technology has gained increasing prominence in the past few years as national policy initiative for balanced regional and area development, policy guidelines of government. Accordingly, this study has been undertaken to examine the direct impact of technology on farmers' socioeconomic empowerment and development which followed by finding correlation between technology and economic progress through development. For evaluating the impact it considered various dimensions like health, spouse's emotions and children's education with their behaviour and health. With 150 respondents from Solapur district of Maharashtra state, this empirical study focused two major reasons for adoption of agro-technology categorized as 'self motivated' and 'external influences' which includes water or scarcity of resources, mechanization of agriculture, government rules and schemes, better value for produce, sound life, etc. The initial schedule contained 116 items on various dimensions of self motivation reasons, external influences factor, social development, economic development, economic progress, health and behavioural change. In order to collect more clear and satisfactory responses from respondents through structured questionnaire, some items were modified and few items deleted and 90 items were finally retained. As it is a multivariable study, apart from parametric statistical tools, ANOVA, MANCOVA, Confirmatory factor analysis and Structural Equation Modelling (SEM) are used in this study for data analysis and it has been done using SPSS (20.0) and SPSS AMOS. In this study, it is found that there is correlation between technology and economic progress of farmers and it also found that health consciousness has increased and behavioural pattern has changed.

Key words: Agro-technology, Economic development, Social development, External influences, Economic progress