Abstract
ABSTRACT

The study was intended to analyze the indigenous practices in agricultural and horticultural crops with the objectives of collecting the available Indigenous Tribal Agricultural Practices (ITAPs) in the study area, analyzing their rationality, adoption and their perceived effectiveness, constraints faced in the adoption of ITAPs and also studying the characteristics of farmer respondents.

With these objectives in view, this study was conducted in three phases in the selected seven clusters of villages in Kolli hills of Namakkal district of Tamil Nadu. During the first phase, 696 ITAPs representing the tribal farming systems were collected and documented from 140 aged and experienced farmers. In the second phase 250 selected ITAPs applicable to nine crops and general agriculture were judged for their rationality by scientists. During the third phase, extent of adoption of the selected 250 ITAPs was studied with 300 tribal farmers spread over the clusters of the villages in Kolli hills. Perceived effectiveness of 126 ITAPs applicable to 5 crops was studied with 300 respondents and were asked to rate the effectiveness of each ITAPs adopted by them against each of the traits included in the list. Then the Perceived Effectiveness Index (PEI) for each of the ITAPs adopted by each of the respondents was worked out. Twenty three characteristics of farmer respondents were also analyzed to study their profile and their association with dependent variables. Data were gathered and analyzed by employing suitable statistical tools.

Salient findings of the study are detailed below:

The collected 696 ITAPs were categorized into seven clusters of villages, five farming systems, 12 technologies, 27 crops and 13 general agriculture subheads.

From the total of selected 250 ITAPs, 85.20 per cent were rated as rational and 14.80 per cent as irrational practices by the scientists.

In the case of extent of adoption of ITAPs, 36.00 per cent of the respondents were high adopters followed by 32.00 per cent of respondents in low and medium categories of adopters each, respectively. All the ITAPs were found to be adopted by more than 50 per cent of the farmers in respect of Italian millet, Finger millet, Red gram, Field beans, Tapioca, Pine apple and general agriculture. But it was 69.70 % in Low land paddy, 95.65 % in Little millet and 92.30 % in Hill banana. High adoption was noticed in general agricultural practices. All the 50
ITAPs selected in general agricultural practices, were adopted more than 50 per cent of the respondents and all of them were rational.

A majority of the respondents were reported to have high level of perceived effectiveness (36.67 %) followed by medium (32.67%) and low (30.66%) categories. Hence, a majority of the respondents were found to have medium to high level (69.34%) of OPEI.

A majority of the farmers were old aged, educated from functionally literate to middle school level, belonging to the category of agriculture + daily wages + dairy with regard to their occupational status, living in joint family type with medium family size, possessing small farm holding had medium level of livestock possession and social participation, possessed medium to low level of extension agency contact, mass media exposure, value orientation, scientific orientation, innovativeness, fatalism and traditionalism, with medium to high level of economic motivation, religious belief and intra tribal communication, possessing low level of attitude towards agricultural development programmes, with high level of farming experience, with majority being self reliant and conservative with medium to high level of attitude towards ITAPs.

The correlation analysis revealed that eleven independent variables viz., Age, Family type, Family size, Livestock possession, Farming experience, Self reliance, Conservatism-Liberalism, Fatalism-Scientism, Religious belief, Intra tribal communication and Attitude towards ITAP, exhibited a positive significant association with extent of adoption of ITAPs and OPEI. About ten independent variables viz., Educational status, Occupational status, Social participation, Extension agency contact, Mass media participation, Scientific orientation, Innovativeness, Economic motivation, Progressivism- Traditionalism and Attitude towards Agricultural Development Programme exhibited a negative significant association with extent of adoption of ITAPs and OPEI. Value orientation expressed negative significant association with extent of adoption of ITAPs. The remaining one variable viz., farm size expressed a non significant association with the extent of adoption of ITAPs. Whereas two variables viz., Farm size and Value orientation expressed a non significant association with OPEI.

The step down multiple regression analysis indicated that three variables viz., Age, Farming experience and Conservatism-Liberalism were found to influence the extent of adoption of ITAPs to the tune of 76 per cent, while three variables such as Farming,Experience, Conservatism- Liberalism and Fatalism-Scientism influenced the OPEI of respondents to an extent of 46 per cent.

In spite of high level of adoption and perceived effectiveness of ITAPs the Malayali tribes also faced some constraints in the adoption of the same due to some factors.