

**USEFULNESS OF AGRICULTURAL STRATEGIES IN
MITIGATING THE IMPACT OF CLIMATE CHANGE ON
PADDY FARMING: A STUDY IN PORATHEEVU PATTU DS
DIVISION, BATTICALOA**



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ABSTRACT

Paddy cultivation is one of the most important agricultural activity in the world, serving as stable food in most of the countries. The climate change has high impact on paddy farming. The research investigates the usefulness of agricultural strategies in mitigating the impact of climate change on paddy farming: A study in Poratheevu Pattu DS division, Batticaloa. The study aims to evaluate the usefulness of agricultural strategies in mitigating the impact of climate change on paddy farming in Poratheevu Pattu DS division, Batticaloa. 100 farmers were selected using simple random sampling method and pre-structured questionnaire was used to collect the data. The data were analysed by using SPSS version 27.0 software. Descriptive statistics and multiple regression analysis were conducted to analyse the data. The descriptive analysis shows that the majority of respondents were male (80%) and only 20% were female. Sixty percentage of respondents represented as their main income source was paddy farming and 42% of respondents with 6-10 years of farming experience. Fifty-one percentage of respondents had grade 6-10 with 31-40 years of age (29%). Forty-three percentage of the farmers faced drought and flooding. Fifty-two percentage of respondents fully affected by decrease in crop yield while 24% fully affected by shortage of water. Ninety-eight percentage of respondents used improved irrigation techniques and suitable rice varieties. Regression analysis indicates availability of knowledge ($p < 0.037$) and educational level ($p < 0.021$) significantly impact on the usefulness of agricultural strategies. This study concludes that while agricultural strategies can enhance climate resilience, their success largely depends on educational level and availability of knowledge. Therefore, this study suggested that policymakers to strengthen agriculture extension services and farmers participate agricultural training programs and workshops.

Keywords: Agricultural strategies, Climate change, Educational level, Paddy farming, Mitigation

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