PERCEPTION, KNOWLEDGE AND ADAPTATION STRATEGIES OF PADDY FARMERS TOWARD CLIMATE CHANGE: A STUDY IN PUTTALAM DISTRICT



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ABSTRACT

Agriculture plays vital role in the world economy as well as the local economy. Paddy cultivation is one of the crucial components of agriculture. Due to COVID-19, there was an economic crisis in the country. The price of the rice increased because there was no rice. Therefore, it is very important to cultivate rice in other areas in addition to the main rice cultivation areas. Therefore, it is important to know their knowledge, perception about climate change and their adaptation. The paddy cultivation is susceptible to many risks from the date of establishment until the harvesting. Extreme climate change especially in developing countries. Just like the lack of knowledge about climate changes, productivity is wasted. It affects the country's economy a lot.

This study aimed to perception knowledge and adaptation strategies of paddy farmers toward climate change in Karuwalagaswawa, Anamaduwa ,Archchikattuwa ds divisions in Puttalam district. Both primary and secondary data were used in the study.

The primary data were gathered through personal interviews from randomly selected 100 farmers in the 03 DS divisions of the Puttalam district. Control sample method was used in the survey, and data were collected through a pre-structured questionnaire. Collected data was analysed through the SPSS (statistical package for social sciences) version 21.0 statistical software package and with the use of excel data.

The study revealed that the average age of paddy farmers was 50-60 years old, 72% of farmers were males and 28 of farmers were females. The majority educational level of the farmer was up to the secondary level. The average family size was four members,

and the most of the farmers had 10-15 years of farming experience in paddy cultivation.

Most of farmers 26% had 4-5 across of land. The majority ownership of land the farmers had own land. Paddy farmers brought in the most production during the Maha season. A most cost (18.9%) had to be spent on ploughing and harvesting. Most people getting information (78%) television, 70% engaged with other sources. Most of farmers (83%) know about term climate change and 17% farmers not heard about climate change. Selected DS division most farmers (45%) were connected tank irrigation method. In the research, farmers expressed their knowledge of the effects of climate change 92% of respondents concurred that deforestation. 86% agreed that rapid urbanization contribute to climate change. Farmers' perceptions of the effects of climate change varied, with 87 percent identifying it as a significant problem and 97 percent believing it affects the natural environment. They observed grain quality alterations (100%) and increased irrigation (67%). The rainfall was decrease in 2015to 2016. According to the rank order of the adaptation strategies to climate change increased use of Changing planting dates was rank first and thus most important among farmers adaptive strategies to climate change and 74% of the farmers ranked it strongly agree and agree to the that important. The crop rotation was ranked as the last one where 0% no ranked it as agree or strongly agree important adaptation strategy.

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