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CLIMATE CHANGE AND PRACTICES OF FARMERS` TO MAINTAIN RICE YIELD: A CASE STUDY

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Abstract

A survey was conducted during December 2019 to March 2020 in the Siraha district of Nepal to assess farmers' perception on climate change and identifications of local practices to maintain the yield of rice production. Total 60 samples were purposively selected from the study site. During interaction and interview, the opinion of 75- 80% formers was that temperature increases, rainfall duration and its frequency decreases due to the global warming. About 33.33%rmers experience was an increase in flooding hazard due to increase in rainfall intensity during the rainy season in Siraha and its vicinity. The majority of respondents perceived increased in weed and pest (65%) and new weed (30%) and new pest (26.7%) infestation due to climate change. About 18% respondents had a clear knowledge of climate change. The major source of information was selfexperiences (80%) and organization (20%). The major climate change adaptation practices adopted by farmers were the use of drought-resistant varieties (11.67%), flood-resistant varieties (13.33%) and early maturing crops (15%). Crop insurance is one of the adaptation practices to climate change. The study showed that 63.33 % of the respondents know about crop insurance policy but none of the respondents have done crop insurance on different crops. The increase in disease and pest infestation is major problems of farmers. The focus group discussion and key informant study showed that the farmers were positive to adopt climate change adaptation strategies. So, Government and policymakers should focus on climate-resilient adaptation strategies formulation for rice cultivation through intensive research and extension package. Adoption of different resistant varieties and technological adoption like zero tillage, application of irrigation, and training related to adoption techniques should be done.

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Climate change, Global warming, Perception, Rainfall, Rice production

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