Climate Change 2019 : Extended Abstract : Assessing the Farm Level Adaptation to Climate Change: A Case of Rice Farmers in the Southern Part of Bangladesh

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Abstract :

This study is motivated by the susceptibility of rice farming to climate change and partly by the limited studies on this topic in Bangladesh. The study has investigated the socioeconomic condition, adaptation strategies, barriers to adaptation as well as influencing determinants of adaptation strategies of costal rice farmers using survey data of 120 households through simple random sampling from two costal Upazillas namely Betagi under the district of Barguna and Golacipa under the district of Patuakhali of Bangladesh. Different statistical analysis including MNL model are employed to fulfill the objectives of the study. The farmers have perceived a gradual increase in temperature but abnormality in rainfall which has serious impact on rice production. Farmers have taken a range of adaptation strategies to reduce the adverse impact of climate change. The major adaptation strategies are direct-seeded rice, supplementary irrigation, cultivation of HYV, adjusting planting calendars and techniques, livestock, duck and poultry rearing, and cultivation of non-rice crops. However, lack of weather forecast information, lack of knowledge concerning appropriate adaptation and poor information on early warning systems are among the important barriers to adaptation. The results of MNL model indicate that farming experience, access to agricultural credit, access to electricity, access to information and extension services have significant influence on the choice of adaptation strategies. Government policy should target improving farmers' access to credit, electricity and extension services, and provide HYV varieties suitable for the local condition to enhance the adaptation capacity of the vulnerable rice farmers.

Note : This work is partially presented at 6th Global summit on Climate Change on October 21-22, 2019 Amsterdam, Netherlands