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Adaptation of Farming Activities to Cope with Climate Change in Yemathin Township in the Dry Zone Region of Myanmar

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Abstract

In Myanmar, the negative effects of climate change on agriculture occur throughout the country. This study analyzes the impacts of climate change on agriculture in the dry zone region of Myanmar and the adaptation of farming activities by the farmers to cope with the changing climate. This study is conducted with 97 farm randomly selected households from eight villages in the Yamethin Township. In the study, farm households reported the most common climatic shocks, the major impacts on crop production and their adaptation of farming activities. The study found that the cropping patterns of upland farm' households are more diversified than those of lowland farm' households. In addition, access to irrigation facilities enables the upland farmers to produce more diverse crops. The most reported extreme climate events were erratic rainfall and flash flooding (95 %), and droughts (90 %). The most common adaptation measures are planting early maturing varieties (37.11 %), adoption of soil and water management practices (23.71 %), and changing crops (21.65 %). Furthermore, a multinomial logistic regression model was used to show the influence of farmers' socio-economic and institutional characteristics on choosing adaptation measures. Finally the study also describes future adaptation options identified by the farmers to cope with climate change and identifies potential policy and strategic interventions to promote the adaptation process.

Keywords: Adaptation measures, climate change, dry zone

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