



Tropentag, September 17-19, 2013, Stuttgart-Hohenheim
“Agricultural development within the rural-urban continuum”

Adaptation to Climate Change in Agriculture and Livestock – The Case of Bangladesh

MUNTAHA RAKIB

University of Bonn, Center for Development Research (ZEF), Germany

Abstract

Bangladesh is identified worldwide as one of the countries most vulnerable to climate change, owing to the densely populated coastal area and half of the citizens living below the poverty line. With the increasing threat of climate change, farmers need to find strategies to adapt. Adaptation is an effective way to manage long-term adverse impacts of climate-related shocks and reduce vulnerability. It requires farmers to perceive that climate is changing and become aware of the available adaptation strategies to choose from among a set of options in their own regions.

This paper seeks to explore different types of adaptation strategies farmers adopt, the determinants of adaptation strategies and constraints of adapting, differentiated for male and female headed farmers in rural Bangladesh. The study used panel data collected in 2010 and 2012 in Bangladesh to find the determinants of adaptation. Preliminary results find that 93% of male headed households undertake adaptation strategies while the share is 75% for female headed households. Furthermore, they suggest that total asset values, access to electricity, livestock holdings, receiving scholarships, are important positive determinants of adaptation. Off-farm employment is negatively related to agricultural adaptation. Men have a higher access to extension services than women. Gender-differentiated constraints to adaptation strategies are lack of information about climate change, shortage of money, no access to inputs and shortage of water among others. The paper provides a set of options of available adaptation strategies by region, which is important for identifying locally-appropriate policy interventions in rural Bangladesh.

Keywords: Adaptation, climate change, gender