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Participatory governance towards diffusion of climate smart agriculture: Case study from northern Bangladesh

MD REZAUL KARIM¹, ANDREAS THIEL²

¹*University of Kassel , International Agricultural Policy and Environmental Governance, Germany*

²*University of Kassel, International Agricultural Policy and Environmental Governance, Germany*

Abstract

This research aimed to understand the planning and implementation processes of participatory governance leading to choice and diffusion of five Climate Smart Agricultural (CSA) technologies; as well as how exogenous and endogenous factors affect the different action situations and the outcomes. The innovation diffusion and decision making theories, group approach and IAD framework were used to make a clear understanding and answer the research questions. The research design suits a mixed method approach in combination of qualitative and quantitative data. Key Informant Interview (KII), Focus Group Discussion (FGD), observation and participatory pair-wise ranking were used for collecting qualitative information, while secondary sources, structured interview and survey were employed for quantitative data collection. The findings revealed different degree in the rules-in-use in the four cases. Besides these institutions, the context, climate uncertainty and community attributes such as reciprocity, mutual understanding and traditional habits play important role for the diffusion of CSA technologies. Among governance process qualities, overall legitimacy and effectiveness were perceived medium to high, while transparency, accountability and the equity for marginalised participants were found low to medium. Crucial to the notion of local farmer’s involvement in planning process that ensure inoculation of voices of community to decision making. Farmers concerned that effectiveness of CSA technologies were not visible in short term, but these practices have been geared to improve the adaptability and ecological sustainability for the long term. Although diffusion curves show multiple pattern of cumulated adoption over time, but adoption rate of three CSAs equally reached over 40%; because these technologies were most widely accepted by all four cases due to similar interests and contexts. Results also showed few limitations of institutions and participatory governance approach, but institutional rearrangements such as bottom up planning, farmers-to-farmer sharing and face-to-face communication do not differ widely among four cases. The study further suggests that it is very necessary to generate and disseminate context and need based technologies through overcoming the institutional shortcomings identified here, as well as promoting the governance qualities, especially more emphasising to ensure the equity, transparency and accountability.

Keywords: Climate smart agriculture, diffusion, northern Bangladesh, participatory governance