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## Floating Bed Fodder Production and Climate Change Adaptation Policies for Livestock Farming in Bangladesh

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## Abstract

According to climate change index (2019), Bangladesh ranked 7<sup>th</sup> among the most disaster-affected countries in the world. A significant number of people already have been displaced and due to river erosion, flood, and other disasters. Which is creating extra pressure into the city and on the other hand losses in the agricultural sector. Farmers along with their livestock suffer from food shortage during the flood. Every year, 35-40% of areas of Bangladesh goes underwater. Some Haor basin areas are waterlogged for two to six months. During the flood, the affected peoples suffer food scarcity, transportation problem and failure of crop cultivation. Their domestic animals suffer a lot for food scarcity. Floating bed agriculture is an alternative agriculture practice to ensure food security in the crisis time. This research explores the climate change adaptation efforts and fodder production for livestock farming for the long-term waterlogged areas and the governance challenges. This research is based on both primary and secondary data using qualitative research method; expert-interviews. Interviews were conducted with the experts of different stakeholders' group e.g. ministries, government and non-governmental organisations. Researchers explore that, in floating be fodder production German grass can be used as the output is better than the local grasses. The result shows that the total production, length of fodders, nutritional status, in vitro degradability and in vitro gas production were similar for German grass from both in floating bed and inland. Production cost (1.4 tk kg<sup>-1</sup>) was less in floating bed fodder cultivation in compared with the same amount of grass in soil. Findings suggest that German grass can be used as alternative fodder cultivation for the smallholder farmers to supply food for the livestock during the flood. But the smallholder farmers in the coastal belt areas do not know about German grass and floating bed fodder production techniques to feed their livestock. Findings also suggest that networking, communication and coordination gap between different implementing organisations are leading delay and repetition of knowledge generation. Strengthening the capacity of institutions by experienced and expert leaders will be more efficient to speed up the processes.

**Keywords:** Bangladesh, climate change adaptation, floating bed, fodder production, smallholder farmers

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