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Rainfall, Flood and Rice Cultivation in South Asia

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South Asian rice cultivation has been believed to be maintaned by summer monsoon rainfall and rice production is strongly influenced by summer monsoon rainfall, in particular, in India. On the other hand, flood disasters often occur recently in Bangladesh and their severe damages have been widely reported. In this presentation, we will present the relationship among rainfall, flood and rice production in South Asia in particular, in North India and Bangladesh. Unlike India, no clear relationship was found between rice production and rainfall, while drastic increase of rice production was found in the years after the recent severe floods in Bangladesh. In Bangladesh, after the biggest flood in 1998 in the past century, the rice production in dry season has been exceeding that of main wet season. It is also noted that the relationship between rainfall and rice production in North India shows regional and temporal differences. These results clearly show the regional and temporal changes of relationship between climate and agriculture.

Keywords: monsoon, flood, rice production, rainfall variation