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## **Rice paddy as a Climate Change Adaptation option in the wetlands of Bangladesh**

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Bangladesh is recognized as one of the countries most vulnerable to climate change. Climate induced hazards such as flood, cyclone, salinity, drought, temperature and seasonal anomalies and extremes are damaging assets and homes, properties and infrastructure. The total area of the wetlands of the country has been variously estimated at seven to eight million hectares, or about 50% of the total land surface. About 65% of land area of Bangladesh is subject to flooding of different depth and duration. Communities and people predominantly dependent on wetland natural resource for livelihood support are finding it difficult to cope with the uncertainties and magnitude of the impacts of climate change. Many adaptation activities help to provide communities with diversified livelihoods, alternative source of income, or better infrastructure. In agriculture sector diversification of crop is a key approach in addressing climate change. The rice paddy was found one of the best options of climate change adaptation. Because of the land type of the country rice paddy cultivation is wide in the country. The haor basin which covers the north-eastern part of the country is mostly dependent on the rice paddy; the beel ecosystem of the south-east and the central-east is also ingenious with the rice paddy. Rice paddy specifically the deep water rice, cultivated on 2.5 million hectares, comprises about 24% of the total rice area and is virtually the only rice crop that can be grown during the wet season in the deeply flooded river basin. For the food security in the prolonged water logging and flood scenario deep water rice plays a very important role. There are a number of patterns in the traditional culture of rice paddy. Increased salinity made a vast area of coast impossible for cultivation. Few local varieties show some potential in moderate salinity. The present paper aims to analyze the prospective of rice paddy cultivation as an adaptation option to climate change in different wetland ecosystems of the country.