

Adoption and Adoption Gap of Selected BRRI-Released Boro Rice Varieties in Bangladesh

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Abstract : Improved high-yielding modern rice varieties can reduce hunger and food insecurity in Bangladesh. However, lower adoption and higher adoption gap of modern rice varieties are the main concerns of rice researchers, extension specialists, and legislators. This study attempts to determine the adoption status and adoption gap of 10 selected BRRI-released Boro rice varieties to assess some selected socio-economic characteristics of the rice farmers and to explore the contribution of the selected socio-economic characteristics of farmers to their adoption gap of selected BRRI-released Boro varieties. Necessary data were collected from 03 September to 31 December 2021 using a well-structured pre-tested interview schedule from 371 randomly selected farmers covering 12 agricultural blocks of four Upazilas under Cumilla, Mymensingh, Tangail, and Bogura districts. The study revealed that most (73.05%) of the rice farmers had high adoption and low adoption gap; 23.72% had moderate adoption and adoption gap; and the rest 3.23% of respondents' farmers had low adoption and high adoption gap of BRRI-released Boro rice varieties. Overall adoption and adoption gap of BRRI-released Bororice varieties were 77.02% and 22.98%, respectively. Based on the descending order of the Adoption Index, BRRI dhan29 ranked 1st, followed by BRRI dhan28. The adoption indices of these two top-ranked varieties were 38.84 and 30.43, respectively, which were much higher than others. Third to ninth ranked varieties were BRRI dhan58, BRRI dhan89, BRRI dhan88, BRRI dhan50, BRRI dhan74, BRRI dhan81, and BRRI dhan63. Reverse-ranked orders were observed based on the descending order of the Adoption Gap Index (AGI). Stepwise multiple regression analysis indicated that 'knowledge on BRRI-released Boro rice varieties', 'extension contacts', 'rice farming profitability', 'rice farming experience', and 'satisfaction on BRRI-releasedBoro rice varieties' of the farmers had a significant negative contribution to their adoption gap, i.e., positive contribution to their adoption of BRRI-released Boro rice varieties. The study concluded that policy interventions should be taken to improve farmers' knowledge of BRRI-releasedBoro rice varieties by increasing extension contact to all the lower and higher experienced farmers to make them profitable and satisfied to increase adoption and decrease the adoption gap of BRRI-released Boro rice varieties. These issues also urge policy interventions for the rethinking of current dissemination tactics to ensure the widespread adoption of newly released modern Boro rice varieties at the farm level.

Keywords : adoption, adoption gap, Boro, rice, BRRI, Bangladesh

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