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Evaluating the Effect of Agricultural Credit Facility on the Volume of Rice Production in Selected Areas of Dinajpur District, Bangladesh

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Abstract

The study aims at determining the factors for influencing the agricultural credit adoption by the farmers as well as estimating the effect of agricultural credit received from either of formal or informal credit sources and all farmers on rice productivity. Socioeconomic characteristics of rice farmers are also explored. The study uses both secondary and primary data. The primary data was collected from 255 rice farmers by using field survey during December, 2022 by means of multistage random sampling design. Logit regression model and the Cobb-douglas production function are estimated to predict the effects of agricultural credit along with conventional inputs of production on rice productivity. In the regression outcome for all farmers, nine out of fourteen regressors viz, household size, land holding, credit amount, seed, pesticide, age, extension service and distance from the nearest market have a significant impact on rice productivity. While, in the regression result for formal source beneficiaries, seven independent variables viz, farming experience, credit amount, irrigation and distance, age, fertilizer and pesticide have a significant effect on rice productivity. In the regression result for informal source beneficiaries, four independent variables viz, household size, credit amount, seed and irrigation have a significant effect on rice productivity. In the regression result for no credit holders, six independent variables viz, seed, irrigation, fertilizer and pesticide, other cost and distance have a significant effect on rice productivity. Moreover, logistic regression shows that age, education, household size, experience, land size, SDI and average cost are the key significant determinants of the credit access for the farmers. Thus, this study emphasizes more on informal credit sources that is more proficient for the farmers to ensure high rice productivity in general.

Key Words: *Agricultural Credit, Rice Farmers, Productivity, Formal Credit, Production*

