To fulfill the dream of Father of the Nation Bangabandhu Sheikh Mujibur Rahman to make affordable agricultural mechanization

## Increasing Crop Productivity through Cooperative Mechanized Farming by Removing Aisles of Agricultural Land



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## **Abstract**

Rural Development Academy, Bogura undertakes an action research project aimed at converting small segregated agricultural lands into a large one by removing avoidable aisles. If the agricultural land is divided into small plots, it is difficult to use modern agricultural equipments. That is why farmers need to employ more laborers, which is costly. So, farmers are not getting much profit from agricultural activities. Moreover, due to increase in the prices of all agricultural inputs farmers are deprived of fair price most of the time for their agricultural products. The main objective of this study was to examine whether it is possible to increase crop productivity and bring about socio-economic development of farmers through cooperative based mechanized cultivation by removing the avoidable aisles of agricultural land. In this context, a village named Chakpathalia under Sherpur Upazila of Bogura district was selected for this research project. Purposive sampling strategy was followed in the study. The study used both qualitative and quantitative data collection methods for accurate results. Since this is an experimental study, what amount of land will be reclaimed after removing the aisles is one of the prime reasons. A comparative study of the experimental area and those cultivated with the traditional method has been made also. The study result shows that the farmers of Chakpathalia village, despite being unwilling at the initial stage, had completed the activities by organizing through various meeting and motivational workshops. The total land area of the research project was 821 decimals and the total number of owners was 40. Prior to the study, the total number of plots was 49; finally 13 plots had been existed after removing the unnecessary aisles. It unveiled 12.1 decimals of the land as surplus, which increased the amount of land and made it easier to do agricultural works mechanically. Bridhan-49 was mechanically planted in the Aman 2019 season. Considering the benefit cost ratio in mechanized and conventional farming, it was seen that the mechanized method was highly profitable between the two methods. Using the undiscounted method, it was found that Benifit Cost Ratio of mechanization method was 2.46; where as in traditional method it was only 1.33. So, farmers were benefited more from the agricultural mechanization.