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Effects of Climate Change and Livelihood Diversification on Gendered Productivity Gap of Farmers in Northern Regions of Ghana

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Abstract : In the midst of climate variability and change, the role of gender in ensuring food production remains vital. Therefore, this study analysed the gendered productivity among maize farmers, and the effects of climate change and variability as well as livelihood diversification on gendered productivity gap. This involved a total of 619 farmers selected through a multistage sampling procedure. The data was analysed using Oaxaca Blinder decomposition model. From the result, there is a significant productivity gap of 58.8% and 44.8% between male and female heads, and between male heads and female spouses, respectively. About 87.47% and 98.08% of the variations in gendered productivity were explained by resource endowment. While livelihood diversification significantly influenced gendered productivity through endowment and coefficient effect, climate variables significantly affect productivity gap through only coefficient effects. The study concluded that there is a substantial gendered productivity gap among farmers and this is particularly due to differences in endowment. Generally, there is a high potential of reducing gendered productivity gaps through the provision of equal diversification opportunities and reducing females' vulnerability to climate change. Among the livelihood activities, off-farm activities such as agroprocessing and shea butter processing should be promoted. Similarly, the adoption of on-farm adaptation strategies should be promoted among the farmers.

 $\textbf{Keywords:} \ climate\ change\ and\ variability,\ gender,\ livelihood\ diversification,\ oaxaca-blinder\ decomposition,\ productivity\ gap$

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